

10/772,027 EAST

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	470	((514/293) or (548/302.4)).CCLS.	US-PGPUB; USPAT	OR	OFF	2005/12/02 16:28
L2	155	L1 and (triazas or imidazo)	US-PGPUB; USPAT	OR	OFF	2005/12/02 16:28

10/ 772,027

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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 SEP 09 ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS 4 OCT 03 MATHDI removed from STN
NEWS 5 OCT 04 CA/CAPLUS-Canadian Intellectual Property Office (CIPO) added
to core patent offices
NEWS 6 OCT 13 New CAS Information Use Policies Effective October 17, 2005
NEWS 7 OCT 17 STN(R) AnaVist(TM), Version 1.01, allows the export/download
of CAPLUS documents for use in third-party analysis and
visualization tools
NEWS 8 OCT 27 Free KWIC format extended in full-text databases
NEWS 9 OCT 27 DIOGENES content streamlined
NEWS 10 OCT 27 EPFULL enhanced with additional content
NEWS 11 NOV 14 CA/CAPLUS - Expanded coverage of German academic research
NEWS 12 NOV 30 REGISTRY/ZREGISTRY on STN(R) enhanced with experimental
spectral property data

NEWS EXPRESS DECEMBER 02 CURRENT VERSION FOR WINDOWS IS V8.01,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 02 DECEMBER 2005.
V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 13:52:52 ON 02 DEC 2005

=> file reg

COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION

10/ 772,027

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 13:53:04 ON 02 DEC 2005
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STRUCTURE FILE UPDATES: 30 NOV 2005 HIGHEST RN 869059-01-8
DICTIONARY FILE UPDATES: 30 NOV 2005 HIGHEST RN 869059-01-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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*
* The CA roles and document type information have been removed from *
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*

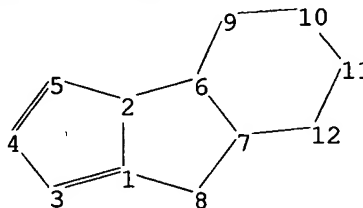
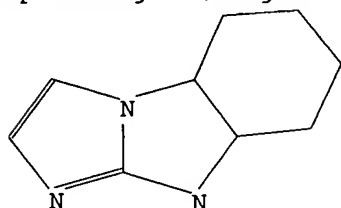
Structure search iteration limits have been increased. See HELP SLIMITS
for details.

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=>

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ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12
ring bonds :
1-3 1-2 1-8 2-5 2-6 3-4 4-5 6-7 6-9 7-8 7-12 9-10 10-11 11-12
exact/norm bonds :
1-3 1-2 1-8 2-5 2-6 3-4 4-5 6-7 6-9 7-8 7-12 9-10 10-11 11-12

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom

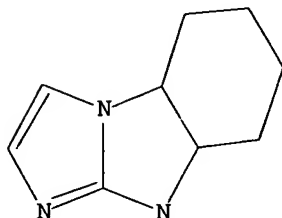
10/ 772,027

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sample

SAMPLE SEARCH INITIATED 13:53:22 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 436 TO ITERATE

100.0% PROCESSED 436 ITERATIONS

50 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 7468 TO 9972

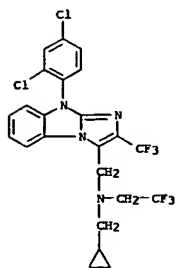
PROJECTED ANSWERS: 1469 TO 2691

L2 50 SEA SSS SAM L1

=> d scan l2

10/ 772,027

L2 50 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9H-imidazo[1,2-a]benzimidazole-3-methanamine, N-(cyclopropylethyl)-9-(2,4-
dichlorophenyl)-N-(2,2,2-trifluoroethyl)-2-(trifluoroethyl)- (9CI)
MF C23 H18 Cl2 F6 N4



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

10/ 772,027

=> s l1 full

FULL SEARCH INITIATED 13:53:42 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 7797 TO ITERATE

100.0% PROCESSED 7797 ITERATIONS
SEARCH TIME: 00.00.01

1612 ANSWERS

L3 1612 SEA SSS FUL L1

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

161.33

161.54

FILE 'HCAPLUS' ENTERED AT 13:53:48 ON 02 DEC 2005

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FILE COVERS 1907 - 2 Dec 2005 VOL 143 ISS 24

FILE LAST UPDATED: 1 Dec 2005 (20051201/ED)

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=> d his

(FILE 'HOME' ENTERED AT 13:52:52 ON 02 DEC 2005)

FILE 'REGISTRY' ENTERED AT 13:53:04 ON 02 DEC 2005

L1 STRUCTURE UPLOADED

L2 50 S L1 SAMPLE

L3 1612 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 13:53:48 ON 02 DEC 2005

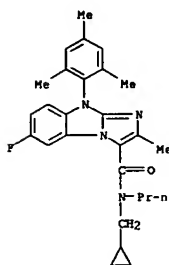
=> s l3

L4 155 L3

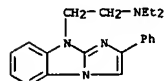
=> d l4 1- ibib abs fhitr

YOU HAVE REQUESTED DATA FROM 155 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:760346 HCAPLUS
 DOCUMENT NUMBER: 143:367245
 TITLE: Synthesis and structure-activity relationship of imidazo[1,2-a]benzimidazoles as corticotropin-releasing factor 1 receptor antagonists
 AUTHOR(S): Han, Xiaojun; Pin, Sokhom S.; Burris, Kevin; Fung, Lawrence K.; Huang, Stella; Taber, Matthew T.; Zhang, Jie; Dubowchik, Gene M.
 CORPORATE SOURCE: Pharmaceutical Research Institute, Bristol-Myers Squibb Company, Wallingford, CT, 06492, USA
 SOURCE: Bioorganic & Medicinal Chemistry Letters (2005), 15(18), 4029-4032
 CODEN: BMCLEB; ISSN: 0960-894X
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB 8-Aryl-1,3a,8-triazacyclopent[a]indene derivs. represent a novel series of high binding affinity corticotropin-releasing factor 1 receptor antagonists. Here, their synthesis, structure-activity relationship, and pharmacokinetic properties of one compound, N-(cyclopropylmethyl)-N-propyl-2-(trifluoromethyl)-9-(2,4,6-trimethylphenyl)-9H-imidazo[1,2-a]benzimidazole-3-methanamine (K_i = 23 nM) were reported.
 IT 444323-33-5P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
 (Preparation of imidazo[1,2-a]benzimidazole carboxamide derivs. and study of their activity as corticotropin-releasing factor 1 receptor antagonists and study of their structure-activity relationship)
 RN 444323-33-5 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-3-carboxamide, N-(cyclopropylmethyl)-6-fluoro-2-methyl-N-propyl-9-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:402022 HCAPLUS
 DOCUMENT NUMBER: 143:222057
 TITLE: Some aspects of immunomodulatory effects of new benzimidazole derivatives
 AUTHOR(S): Samotruieva, M. A.; Khivrina, S. A.; Matveev, A. B.
 CORPORATE SOURCE: A. V. Lunacharskii State Medical Academy, Astrakhan, Russia
 SOURCE: Bulletin of Experimental Biology and Medicine (2005), 139(1), 75-76
 CODEN: BEXBAN; ISSN: 0007-4888
 PUBLISHER: Springer Science+Business Media, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Immunomodulatory activity of new condensed benzimidazole derivs. was studied in CBA mice. Some of these derivs. injected in a dose of 50 mg/kg on the day of immunization stimulated humoral and cellular elements of the primary immune response to sheep erythrocytes in mice.
 IT 23572-32-9, RU-13
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (condensed benzimidazole derivative RU-355, RU-284 and RU-254 stimulated spleen weight, nuclear and antibody producing cell count, delayed type hypersensitivity and is promising as base for new highly effective immunomodulator in mouse)
 RN 23572-32-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HC1

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

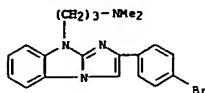
L4 ANSWER 1 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:369133 HCAPLUS
 DOCUMENT NUMBER: 142:435774
 TITLE: Compositions treatment of chronic inflammatory diseases
 INVENTOR(S): Shapiro, Howard K.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 44 pp., Cont.-in-part of U.S. Ser. No. 610,073, abandoned.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005090553	A1	20050428	US 2004-924945	20040824
PRIORITY APPLN. INFO.:				
			US 1992-906909	B2 19920630
			US 1994-241603	B2 19940511
			US 1997-814291	B2 19970310
			US 2000-610073	B2 20000705

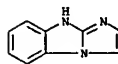
OTHER SOURCE(S): MARPAT 142:435774
 AB This invention defines novel compns. that can be used for clin. treatment of a class of chronic inflammatory diseases. Increased generation of carbonyl substances, aldehydes and ketones, occurs at sites of chronic inflammation and is common to the etiologies of all of the clin. disorders addressed herein. Such carbonyl substances are cytotoxic and addnl. serve to perpetuate and disseminate the inflammatory process. This invention defines use of compns., the orally administered required primary agents of which are primary amine derivs. of benzoic acid capable of reacting with the carbonyl substances. P-Aminobenzoic acid (or PABA) is an example of the required primary agent of the present invention. PABA has a small mol. weight, is water soluble, has a primary amine group which reacts with carbonyl-containing substances and is tolerated by the body in relatively high dosages for extended periods. The method of the present invention includes administration of a composition comprising: (1) an orally consumed primary agent; (2) a previously known medicament co-agent recognized as effective to treat a chronic inflammatory disease addressed herein administered to the mammalian subject via the oral route, other systemic routes of administration or via the topical route; and (3) optionally 1 or more addnl. orally consumed co-agent selected from the group consisting of antioxidants, vitamins, metabolites at risk of depletion, sulfhydryl co-agents, co-agents which may facilitate glutathione activity and nonabsorbable primary amine polymeric co-agents, so as to produce an additive or synergistic physiol. effect of an anti-inflammatory nature.
 IT 36994-25-9, 2-(p-Bromophenyl)-9-dimethylaminopropyl-9H-imidazo[1,2-a]benzimidazole
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (compns. treatment of chronic inflammatory diseases)
 RN 36994-25-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-propanamine, 2-(4-bromophenyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L4 ANSWER 4 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:789347 HCAPLUS
 DOCUMENT NUMBER: 142:13572
 TITLE: On photoinduced double-proton transfer reactions: the photophysics of the 9H-imidazo[1,2-a]benzimidazole dimer
 AUTHOR(S): Catalan, J.; De Paz, J. L. G.; Del Valle, J. C.; Claramunt, R. M.; Mas, Th.
 CORPORATE SOURCE: Departamento de Química Física Aplicada, Universidad Autónoma de Madrid, Madrid, E-28049, Spain
 SOURCE: Chemical Physics (2004), 305(1-3), 175-185
 CODEN: CHMPHC2; ISSN: 0301-0104
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The proton transfer in the C2h doubly H-bonded 9H-imidazo[1,2-a]benzimidazole (9HIB) dimer has been investigated. From the theor. point of view, with the aid of d. functional theory (DFT) and Moller-Plesset second-order perturbation theory: (i) the dimer formation presents at 298 K a large free energy for dimerization of $\Delta G_0 = -8.92$ kcal/mol; (ii) the double-proton transfer (DPT) tautomer of the 9HIB dimer in the ground electronic state (S0) is only slightly less stable ($\Delta G_0 = 2.45$ kcal/mol) than the normal tautomer dimer; and (iii) the DPT potential energy curve in S0 exhibits double min., and a large activation energy barrier of 8.2 kcal/mol for the reverse DPT process. However, the 9HIB dimer does not undergo an excited state DPT reaction, calculated at the time-dependent DFT level and exptl. checked with fluorescence spectroscopy, owing to the unusual decrease of basicity (-16.7 kcal/mol) of the N-imidazole group upon photoexcitation. The UV-Vis spectroscopic exptl. evidence (from 298 to 213 K) confirms the ease to generate the 9HIB dimer, and the card-pack aggregates of 1-methylimidazo[1,2-a]benzimidazole in 2-methylbutane and decalin. Electronic supplementary information (ESI) is available at doi:10.1016/j.chemphys.2004.06.048.
 IT 247-79-0, 1H-Imidazo[1,2-a]benzimidazole
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process) (9HIB; photophysics of imidazobenzimidazole monomer and its doubly H-bonded dimer and photoinduced double-proton transfer reactions)
 RN 247-79-0 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



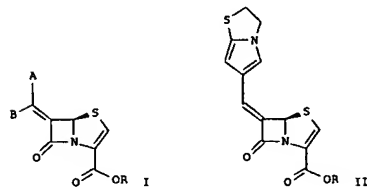
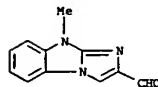
REFERENCE COUNT: 36
 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:550737 HCAPLUS
 DOCUMENT NUMBER: 141:106320
 TITLE: Process for preparing 6-alkylidene penem derivatives
 INVENTOR(S): Abe, Takao; Matsunaga, Hiroshi; Mihira, Ado; Sato, Chisato; Ushirogouchi, Hideki; Sato, Koichi; Takasaki, Tsuyoshi; Venkatesan, Aranapakam Mudumbai; Mansour, Tarek Suhayl
 PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA
 SOURCE: U.S. Pat. Appl. Publ., 103 pp., Cont.-in-part of U.S. Ser. No. 427,666.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004132708	A1	20040708	US 2003-693315	20031024
US 2004053913	A1	20040318	US 2003-427666	20030501
PRIORITY APPLN. INFO.:			US 2002-377048P	P 20020501
			US 2003-427666	A2 20030501
OTHER SOURCE(S):			CASREACT 141:106320; MARPAT 141:106320	
GI				

L4 ANSWER 5 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



AB The present invention provides a process of making compds. of formula I (R = H, C1-6 alkyl, C5-6 cycloalkyl, or substituted ester; A, B = H, heteroaryl, fused bicyclic, fused tricyclic, etc.) which are useful for the treatment of bacterial infection or disease. Thus, sodium (5R), (6Z)-6-(2,3-dihydroimidazo[2,1-b]thiazol-6-ylmethylene)penem-3-carboxylate (II) was prepared via a multistep synthetic sequence which started from 6-aminopenicillanic acid.
 IT 623931-49-7P
 RL: IMP (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (process for the preparation of 6-alkylidene penem derivs.)
 RN 623931-49-7 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-2-carboxaldehyde, 9-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 6 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:529211 HCAPLUS

DOCUMENT NUMBER: 141:93966

TITLE: Hair dyeing compositions containing a diheteroarylamine direct dye or its leuco precursor

INVENTOR(S): Guerin, Frederic; Lagrange, Alain

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Fr. Demande, 51 pp.

CODEN: FROKBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2849371	A1	20040702	FR 2002-16845	20021230
EP 1437122	A1	20040714	EP 2003-104983	20031226
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, VI, RO, MK, CY, AL, TR, BG, CZ, EE, EU, SK				
JP 2004210783	A2	20040729	JP 2003-434421	20031226
US 2004187229	A1	20040930	US 2003-746501	20031229
PRIORITY APPLN. INFO.:			FR 2002-16845	A 20021230
			US 2003-450358P	P 20030228

OTHER SOURCE(S): MARPAT 141:93966

AB A hair dyeing composition comprises a compound chosen from the direct dyes of the

diheteroarylamine type and its leuco precursors. Thus, a formulation contained (4-[(bis-(2-methyl-1H-indol-3-yl)methylene)cyclohexa-2,5-dienylidene]dimethylammonium chloride 0.427, benzyl alc. 4.0, PEG 6.0, hydroxyethyl cellulose 0.7, alkyl polyglucoside 4.5, phosphate buffer 7, and water qs to 100 g.

IT 59526-51-1

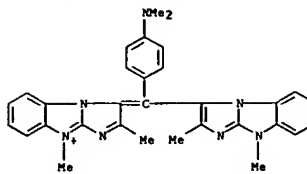
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dyeing compns. containing diheteroarylamine direct dye or its leuco precursor)

RN 59526-51-1 HCAPLUS

CN 3H-imidazo[1,2-a]benzimidazolium, 3-[[4-(dimethylamino)phenyl] (2,9-dimethyl-9H-imidazo[1,2-a]benzimidazol-3-yl)methylene]-2,9-dimethyl-, bromide (9CI) (CA INDEX NAME)

L4 ANSWER 6 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

● Br⁻

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:300908 HCAPLUS

DOCUMENT NUMBER: 141:410

TITLE: Structure-Function Relationships of Multidrug

Resistance P-glycoprotein

AUTHOR(S): Pajeva, Ilka K.; Globisch, Christoph; Wieser, Michael

CORPORATE SOURCE: Centre of Biomedical Engineering, Bulgarian Academy of Sciences, Sofia, 1113, Bulg.

SOURCE: Journal of Medicinal Chemistry (2004), 47(10), 2523-2533

CODEN: JMCHAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The direct structure-function relationships of P-glycoprotein (P-gp) are presently unknown. In this paper two P-gp models are described: a homol. model based on the Escherichia coli Mdr1 lipid transporter and a model based on the crosslinking results of Loo and Clarke. The pharmacophore pattern for the H-site (Hoechst 33342) is derived and binding sites on the transmembrane domains TM5 and TM11 are identified. Binding sites of rhodamines are also proposed on TM6 and TM12 in accordance with the published data. Location of the binding sites is opposite in both models, suggesting that TM5 undergo rotation exposing the substrate bound from the membrane to the pore. It has been concluded that the models derived represent two different functional states of P-gp corresponding to nucleotide-free and nucleotide-bound P-gp. A qual. correspondence to the P-gp crystallog. structure at 20 Å resolution is found. A hypothesis is proposed about rearrangement of TMs upon state transition.

IT 342385-23-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

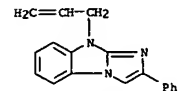
(Biological study); USES (Uses)

(structure-function relationships of multidrug resistance

P-glycoprotein)

RN 342385-23-3 HCAPLUS

CN 9H-imidazo[1,2-a]benzimidazole, 2-phenyl-9-(2-propenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:96153 HCAPLUS

DOCUMENT NUMBER: 141:34907

TITLE: Inhibition of mutagenic activity of 2-aminoanthracene

by benzimidazole derivative

AUTHOR(S): Zinov'eva, V. N.; Ostrovskii, O. V.; Anisimova, V. A.;

Spasov, A. A.

CORPORATE SOURCE: NII Farm., Kafedra Farm. Farmakol., Volgograd. Med.

Akad., Volgograd, Russia

SOURCE: Gigiena i Sanitariya (2003), (5), 61-63

CODEN: GISAAA; ISSN: 0016-9900

PUBLISHER: Izdatel'stvo Meditsina

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The antimutagenic activity of a new benzimidazole derivative RU 185 that has antioxidant properties was observed in the Ames test. This compound reduced the level histidine revertants induced by the promutagen and carcinogen 2-aminoanthracene. Inhibition of the mutagenicity of 2-aminoanthracene appears to be associated with the inactivation of its genotoxic metabolites. The antimutagenic effect of the benzimidazole derivative is possibly due to dihydroxyphenyl group that is present in its structure.

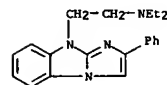
IT 23572-32-9, RU 13

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(inhibition of mutagenic activity of aminoanthracene by benzimidazole derivative)

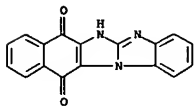
RN 23572-32-9 HCAPLUS

CN 9H-imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

L4 ANSWER 9 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:993992 HCAPLUS
 DOCUMENT NUMBER: 141:243473
 TITLE: Synthesis and biological activity of 1,4-naphthoquinone derivatives, Part II
 AUTHOR(S): Zoorob, H. H.; Berghot, M. A.; Abou-Elzahab, M. M.; Amer, F. A.
 CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Mansoura University, Mansoura, Egypt
 SOURCE: Mansoura Science Bulletin, A: Chemistry (2002), 29(2), 129-142
 CODEN: MSBCT4; ISSN: 1110-4562
 PUBLISHER: Mansoura University
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 141:243473
 AB The reaction of 1,4-naphthoquinone derivative with aminoheterocyclic compds. as 2,3-diamino-pyridine, 2-amino-3-carboxy-1,4-pyrazine, 5,6-diaminopyridine, 5,6-diamino-2,4-dihydroxy-pyrimidine, 2-aminobenzimidazole and 2-amino-5-mercaptothia-3,4-diazolidene gave the corresponding products. These compds. were cyclized in acetic acid to give the corresponding cyclized deriva. In addition, reaction of 1,4-naphthoquinone derivative with active methylene compds. as dimedone, acetophenone deriva., dibenzoylmethane, and 1,3-diphenylacetone gave the corresponding products. Moreover, treatment of p-toluidine and o-phenylene diamine with gave benzocarbazoles and benzindolophenazine. While the same treatments with gave benzindole and benzopyrrolphenazine derivative. In addition, one of the products was reacted with primary aromatic amines to give benzindole. Also, another product was treated with o-phenylene diamine to afford a phenazine derivative. The synthesized compds. were tested against bacteria and/or fungi to evaluate their activities with respect to reference known drug.
 IT 81411-86-1P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation and antibacterial and antifungal activities of naphthoquinone derivs.)
 RN 81411-86-1 HCAPLUS
 CN 5H-Naphth[2',3':4,5]imidazo[1,2-a]benzimidazole-7,12-dione (9CI) (CA INDEX NAME)



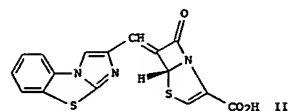
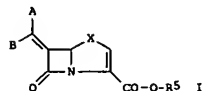
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:993992 HCAPLUS
 DOCUMENT NUMBER: 139:381302
 TITLE: Preparation of heterotricyclic 6-alkylidene-penems as β -lactamase inhibitors for use against bacterial infections or diseases
 INVENTOR(S): Venkatesan, Aranakam Mudumbai; Mansour, Tarek Suhayl; Abe, Takao; Mihira, Ado; Agarwal, Atul; Ushirogouchi, Hideki; Gu, Yansong; Tamai, Satoshi; Sum, Fuk-Wah
 PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA
 SOURCE: PCT Int. Appl., 187 pp.
 CODEN: PIXXD2
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

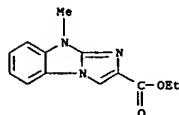
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003093280	A1	20031113	WO 2003-US13451	20030430
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2483562	AA	20031113	CA 2003-2483562	20030430
EP 1499622	A1	20050126	EP 2003-733911	20030430
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003009878	A	20050419	BR 2003-9878	20030430
JP 2005533018	T2	20051104	JP 2004-501419	20030430
US 2004043978	A1	20040304	US 2003-427427	20030501
NO 200404550	A	20050128	NO 2004-4550	20041022
PRIORITY APPLN. INFO.:			US 2002-377051P	P 20020501
			WO 2003-US13451	W 20030430
OTHER SOURCE(S):		MARPAT 139:381302		
GI				

L4 ANSWER 9 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L4 ANSWER 10 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



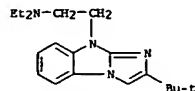
AB The present invention provides heterotricyclic 6-alkylidene-penems (shown as I; variables defined below; e.g. II), pharmaceutical compns. and the use thereof for the treatment of bacterial infection or disease in a patient in need thereof. IC50 values for inhibition of β -lactamase from 4 sources are tabulated for >30 examples of I; in vitro minimal inhibitory concns. against 9 types of bacteria are tabulated for >30 examples of I. ED50 values for protective effects of 12 examples of I (sometimes combined with piperacillin) in mice are tabulated. For I: one of A and B is H and the other is an (un)substituted fused tricyclic heteroaryl group; X is O or S; R5 is H, C1-C6 alkyl, C5-C6 cycloalkyl, or CHR3OCCO1-C6alkyl; and R3 is H, C1-C6 alkyl, C5-C6 cycloalkyl, (un)substituted aryl, or (un)substituted heteroaryl. The compds. I when combined with β -lactam antibiotics will provide an effective treatment against life threatening bacterial infections. Thirty-three example preps. of I are included. For example, II was prepared in 5 steps (81, 93, 40, 67, and 35 %, resp. yields) starting from Et bromopyruvate and 2-aminobenzothiazole and involving intermediates Et imidazo[2,1-b]benzothiazole-2-carboxylate, imidazo[2,1-b]benzothiazole-2-methanol, 2-formylimidazo[2,1-b]benzothiazole, 4-nitrobenzyl 6-[(acetyloxy) (imidazo[2,1-b][1,3]benzothiazol-2-yl)methyl]-6-bromo-7-oxo-4-thia-1-azabicyclo[3.2.0]hept-2-ene-2-carboxylate.
 IT 623931-50-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of heterotricyclic 6-alkylidene-penems as β -lactamase inhibitors for use against bacterial infections or diseases)
 RN 623931-50-0 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-2-carboxylic acid, 9-methyl-, ethyl ester (9CI) (CA INDEX NAME)



10/ 772,027

L4 ANSWER 10 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:870193 HCAPLUS
 DOCUMENT NUMBER: 140:187536
 TITLE: Qualitative and Quantitative Determination of the New
 Antiarrhythmic Drug Ritmidazole
 AUTHOR(S): Stepanov, A. V.; Smirnova, L. A.; Spasov, A. A.
 CORPORATE SOURCE: Volgograd State Medical Academy, Volgograd, Russia
 SOURCE: Pharmaceutical Chemistry Journal (Translation of
 Khimiko-Farmatsevticheskii Zhurnal) (2003), 37(8),
 440-443
 CODEN: PCJOAU; ISSN: 0091-150X
 PUBLISHER: Kluwer Academic/Consultants Bureau
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB This study is aimed at developing methods for the qual. and quant.
 determination
 of ritmidazole by UV and fluorescence spectroscopies and HPLC.
 IT 424798-61-8, Ritmidazole
 RL: ANT (Analyte); ANST (Analytical study)
 (determination of antiarrhythmic drug ritmidazole by HPLC and
 spectroscopy)
 RN 424798-61-8 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, 2-(1,1-dimethylethyl)-N,N-
 diethyl- (9CI) (CA INDEX NAME)



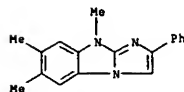
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:807787 HCAPLUS
 DOCUMENT NUMBER: 141:23350
 TITLE: Product class 1: pyrylium salts
 AUTHOR(S): Balaban, T. S.; Balaban, A. T.
 CORPORATE SOURCE: Germany
 SOURCE: Science of Synthesis (2003), 14, 11-200
 CODEN: SSCYJ9
 PUBLISHER: Georg Thieme Verlag
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: English
 GI



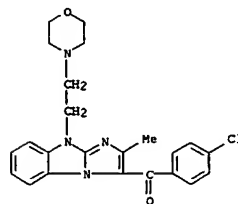
I

AB A review. Methods of preparing pyrylium (I) salts are reviewed including
 ring closure, aromatization and substituent modification reactions. An
 explosion is reported below the melting temperature of a substituted
 4-(phenylethynyl)pyrylium perchlorate.
 IT 157498-77-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (for preparation of pyrylium salts via ring closure, aromatization and/or
 substituent modification reactions)
 RN 157498-77-6 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 6,7,9-trimethyl-2-phenyl- (9CI) (CA INDEX
 NAME)



REFERENCE COUNT: 430 THERE ARE 430 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

L4 ANSWER 13 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:308779 HCAPLUS
 DOCUMENT NUMBER: 140:52729
 TITLE: Synthesis and pharmacological activity of 3-aroyle- and
 3-heteroyleimidazo[1,2-a]benzimidazoles
 AUTHOR(S): Anisimova, V. A.; Spasov, A. A.; Ostrovskii, O. V.;
 Dudchenko, G. P.; Kosolapov, V. A.; Kucheryavenko, A.
 F.; Laktionov, N. P.; Kovalev, S. G.
 CORPORATE SOURCE: Research Institute of Physical and Organic Chemistry,
 Rostov State University, Rostov-on-Don, Russia
 SOURCE: Pharmaceutical Chemistry Journal (Translation of
 Khimiko-Farmatsevticheskii Zhurnal) (2002), 36(12),
 637-642
 CODEN: PCJOAU; ISSN: 0091-150X
 PUBLISHER: Kluwer Academic/Consultants Bureau
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 140:52729
 AB The synthesis of a series of 3-aroyle- and 3-heteroyleimidazo[1,2-
 a]benzimidazoles is described. The synthesized compds. were characterized
 with respect to their pharmacol. properties, including antioxidant,
 antiaggregant, anticalmodulin, and spasmolytic activities.
 IT 154054-70-3P
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
 activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation);
 THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
 (Reactant or reagent); USES (Uses)
 (synthesis and pharmacol. activity of 3-aroyle- and 3-
 heteroyleimidazo[1,2-a]benzimidazoles)
 RN 154054-70-3 HCAPLUS
 CN Methanone, (4-chlorophenyl)[2-methyl-9-[2-(4-morpholinyl)ethyl]-9H-
 imidazo[1,2-a]benzimidazol-3-yl]-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2002:754195 HCAPLUS
 DOCUMENT NUMBER: 137:257697
 TITLE: Compounds capable of modulating the activity of multidrug transporters, and therapeutic use
 INVENTOR(S): Gudkov, Andrei; Kondratov, Roman
 PATENT ASSIGNEE(S): The Board of Trustees of the University of Illinois, USA
 SOURCE: PCT Int. Appl., 73 pp.
 CODEN: PIXKD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

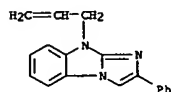
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002076439	A2	20021003	WO 2002-US8896	20020322
WO 2002076439	A3	20040122		
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GE, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003073611	A1	20030417	US 2002-104604	20020322
US 6861431	B2	20050301		

PRIORITY APPLN. INFO.:
 US 2001-278218P P 20010323
 US 2001-300023P P 20010621

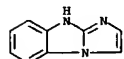
AB Methods of modulating the activity of multidrug transporters are disclosed. The methods use compds. that selectively increase or decrease the efflux capabilities of the multidrug transporter. The methods can be used therapeutically to enhance performance of therapeutic drugs, e.g. chemotherapeutic drugs and antibiotics; to promote detoxification of cells and tissues; and to increase or decrease the efficacy of the blood-brain barrier or placental barrier.

IT 342385-23-3
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (compds. modulating activity of multidrug transporters, and therapeutic use)

RN 342385-23-3 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole, 2-phenyl-9-(2-propenyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 18 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2002:719202 HCAPLUS
 DOCUMENT NUMBER: 138:89444
 TITLE: Structure and spectroscopy of imidazo[1,2-a]imidazoles and imidazo[1,2-a]benzimidazoles
 AUTHOR(S): Mag, Thierry; Claramunt, Rosa M.; Santa Maria, M. Dolores; Sanz, Dionisia; Alarcon, Sergio H.; Perez-Torrabla, Marta; Elguero, Jose
 CORPORATE SOURCE: Dep. de Quim. Organica y Biologia, Fac. de Ciencias, UNED, Madrid, Spain
 SOURCE: ARKIVOC (Gainesville, FL, United States) [online computer file] (2002), (5), 48-61
 CODEN: AQFUAJ
 URL: <http://www.arkat-usa.org/ark/journal/2002/MManas/MM-340C/MM-340C.pdf>
 PUBLISHER: Arkat USA Inc.
 DOCUMENT TYPE: Journal; (online computer file)
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 138:89444
 AB Two azapentalenes containing fused imidazoles have been synthesized and their
 NMR (solution and solid state) and UV properties recorded. Tautomerism in the case of imidazo[1,2-a]benzimidazole (9H tautomer) and the structure of the cations resulting from protonation in both cases have been determined Ab initio calcs. (HF/6-311G**) confirm the greater stability of 9H over 1H-imidazo[1,2-a]benzimidazole tautomer.
 IT 247-79-0, 1H-imidazo[1,2-a]benzimidazole
 RL: PRP (Properties)
 (ab initio calcs. of tautomer: structure and spectroscopy of imidazo[1,2-a]imidazoles and imidazo[1,2-a]benzimidazoles)
 RN 247-79-0 HCAPLUS
 CN 1H-imidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



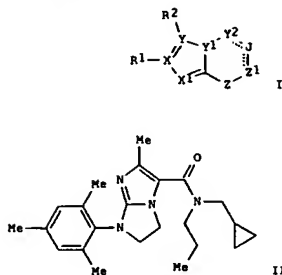
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

L4 ANSWER 19 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2002:574934 HCAPLUS
 DOCUMENT NUMBER: 137:140524
 TITLE: Preparation of imidazo fused heterocycles as corticotropin releasing factor inhibitors
 INVENTOR(S): Dubowchik, Gene M.; Han, Xiaojun; Vrudhula, Vivekananda M.; Zuev, Dmitry; Dasgupta, Bireswar; Michne, Jodi A.
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
 SOURCE: PCT Int. Appl., 321 pp.
 CODEN: PIXKD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002058704	A1	20020801	WO 2002-US841	20020111
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GE, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2434558	A	20020801	CA 2002-2434558	20020111
US 2002183375	A1	20021205	US 2002-44183	20020111
US 6888004	B2	20050503		
EP 1359916	A1	20031112	EP 2002-705754	20020111
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EE 200300342	A	20031215	EE 2003-342	20020111
BR 2002006698	A	20040420	BR 2002-6698	20020111
CN 1499972	A	20040526	CN 2002-807135	20020111
JP 2004531475	T2	20041014	JP 2002-559038	20020111
ZA 2003005531	A	20040727	ZA 2003-5531	20030717
BG 107999	A	20040831	BG 2003-107999	20030717
NO 2003003350	A	20030922	NO 2003-3350	20030725
US 2004254382	A1	20041216	US 2004-767645	20040129
US 2004225130	A1	20041111	US 2004-771661	20040204
US 2004225001	A1	20041111	US 2004-771766	20040204
US 2004235924	A1	20041125	US 2004-772027	20040204
PRIORITY APPLN. INFO.:				
US 2001-264570P P 20010126				
US 2002-44183 A3 20020111				
WO 2002-US841 W 20020111				

OTHER SOURCE(S): MARPAT 137:140524
 GI



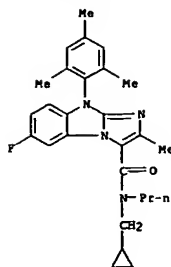
AB The title compds. [I: R1 = H, alkyl, haloalkyl, etc.; R2 = CDNR3R4, CH2NR3R4, etc.; D = O, S; R3, R4 = H, alkyl, haloalkyl, etc.; or NR3R4 = 5-6 membered heterocycle; X = C; Y = C; X1 = N; Y1 = N; Y2 = N, CH, CH2, CO, etc.; J = a bond; CH, CH2, CO, etc.; Z1 = CH, CH2, CO, etc.; Z = NV (wherein V = (unsubstituted Ph, 2- or 3-pyridyl)], useful for the treatment of depression, anxiety, affective disorders, feeding disorders, post-traumatic stress disorder, headache, drug addiction, inflammatory disorders, drug or alc. withdrawal symptoms and other conditions the treatment of which can be effected by the antagonism of the CRF-1 receptor, were prepared E.g., a 5-step synthesis of II (starting with 2,4,6-trimethylaniline) which showed Ki of < 1,000 nM against CRF1 receptor binding.

IT RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of imidazo fused heterocycles as corticotropin releasing factor inhibitors)

RN 444323-33-5 HCAPLUS

CN 9H-Imidazo[1,2-a]benzimidazole-3-carboxamide, N-(cyclopropylmethyl)-6-fluoro-2-methyl-N-propyl-9-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2002:516032 HCAPLUS

DOCUMENT NUMBER: 138:147102

TITLE: Pharmacokinetics of rhythmidazol upon single

intravenous administration

Spasov, A. A.; Stepanov, A. V.; Smirnova, L. A.;

Petrov, V. I.; Shabasheva, I. G.

Pharmacology Department, Volgograd State Medical

Academy, Volgograd, 400066, Russia

Ekspiermental'naya i Klinicheskaya Farmakologiya

(2002), 65(3), 57-61

CODEN: EKFAE9; ISSN: 0869-2092

Izdatel'stvo Folium

Journal

LANGUAGE: Russian

AB The kinetics of rhythmidazol (an imidazobenzimidazole derivative possessing

the properties of I, III, and IV class antiarrhythmics) was studied upon a

single i.v. introduction in rats (in a dose of 10 mg/kg) and in healthy

male volunteers (300 mg/kg). The drug pharmacokinetics in rat blood

plasma was characterized by rapid elimination from the systemic blood flow

(drug detected by HPLC only within 6 h); the total plasma clearance was

1.43 L/(h kg), the terminal half-elimination time was 1.76 h, and the

equilibrium distribution volume (2.42 L/kg) exceeded the total volume of

water in

the animal organism, which is indicative of a high level of absorption in

tissues. The drug is characterized by a low level of binding to blood

proteins and erythrocytes. Investigation of the drug distribution between

tissues showed evidence of extensive, blood-flow-dependent penetration,

with the drug concentration in most tissues exceeding that in the blood

plasma.

The maximum amts. of rhythmidazol were found in the lungs, spleen, liver,

and

kidneys. The major excretion route for the unchanged drug is via urine

and bile, amounting to 10% and -1% of the dose introduced, resp., determined

within 72 h. The results are indicative of a low probability of the

hepatoduodenal circulation of the unchanged substance: about 90% of the

drug undergo metabolic transformation. The pharmacokinetics of

rhythmidazol in volunteers was also characterized by rapid elimination

from the systemic blood flow; the total plasma clearance was 0.89 L/(h

kg), the terminal half-elimination time was 2.12 h, and the equilibrium

distribution volume was 1.66 L/kg. The obtained results show that the

pharmacokinetic profiles of rhythmidazol in rats and humans exhibit a

similar character, with a high intensity of distribution and elimination

processes.

IT 72025-08-2, Rhythmidazol

RI: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological

study); USES (Uses)

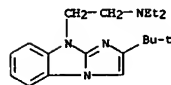
(antiarrhythmics rhythmidazol pharmacokinetics after single i.v.

administration in rat and humans)

RN 72025-08-2 HCAPLUS

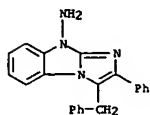
CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, 2-(1,1-dimethylethyl)-N,N-

diethyl-, dihydrochloride (9CI) (CA INDEX NAME)



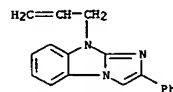
● 2 HC1

L4 ANSWER 21 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STM
 ACCESSION NUMBER: 2002:306000 HCAPLUS
 DOCUMENT NUMBER: 137:352955
 TITLE: Reaction of 1,2-diaminobenzimidazole with 1-aryl-2-bromo-3-phenylpropanone. Synthesis of 2-aryl-3-benzyl-9-aminoimidazo[1,2-a]benzimidazoles. Insuasty, Braulio; Fernandez, Fernando; Quiroga, Jairo; Martinez, Roberto; Gavino, Ruben; Angeles, Enrique
 CORPORATE SOURCE: Grupo de Investigacion de Compuestos Heterociclicos. Departamento de Quimica. Universidad del Valle, Cali, A. A. 25360, Colombia
 SOURCE: Heterocyclic Communications (2002), 8(2), 151-156
 CODEN: HCOMEX; ISSN: 0793-0283
 PUBLISHER: Freund Publishing House Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 137:352955
 AB The reaction of 1,2-diaminobenzimidazole with one equivalent of 1-aryl-2-bromo-3-phenylpropanones in methanol, leads to the formation of 2-aryl-3-benzyl-9-aminoimidazo[1,2-a]benzimidazoles. The structure elucidation of the products is based on detail NMR anal. of expts. such as 1H.COSY.NOESY.13C.DEPT.HETCOR and COLOC.
 IT 474461-65-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (reaction of diaminobenzimidazole with arylbromophenylpropanones)
 RN 474461-65-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazol-9-amine, 2-phenyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

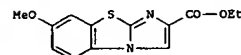
L4 ANSWER 22 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STM
 ACCESSION NUMBER: 2001:888505 HCAPLUS
 DOCUMENT NUMBER: 136:144859
 TITLE: Small molecules that dramatically alter multidrug resistance phenotype by modulating the substrate specificity of P-glycoprotein
 AUTHOR(S): Kondratov, Roman V.; Komarov, Pavel G.; Becker, Yigal; Evenson, Ariel; Gudkov, Andrei V.
 CORPORATE SOURCE: Department of Molecular Genetics, University of Illinois, Chicago, IL, 60607, USA
 SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2001), 98(24), 14078-14083
 CODEN: PNASAG; ISSN: 0027-8424
 PUBLISHER: National Academy of Sciences
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB By screening a chemical library for the compds. protecting cells from adriamycin (Adr), a series of small mols. was isolated that interfered with the accumulation of Adr in mouse fibroblasts by enhancing efflux of the drug. Isolated compds. also stimulated efflux of Rhodamine 123 (Rho-123), another substrate of multidrug transporters. Stimulation of drug efflux was detectable in the cells expressing P-glycoprotein (P-gp), but not in their P-gp-neg. variants, and was completely reversible by the P-gp inhibitors. A dramatic stimulation of P-gp activity against Adr and Rho-123 by the identified compds. was accompanied by suppression of P-gp-mediated efflux of other substrates, such as Taxol (paclitaxel) or Hoechst 33342, indicating that they act as modulators of substrate specificity of P-gp. Consistently, P-gp modulators dramatically altered the pattern of cross-resistance of P-gp-expressing cells to different P-gp substrates: an increase in resistance to Adr, daunorubicin, and etoposide was accompanied by cell sensitization to Vinca alkaloids, gramicidin D, and Taxol with no effect on cell sensitivity to colchicine, actinomycin D, puromycin, and colcemid, as well as to several non-P-gp substrates. The relative effect of P-gp modulators against different substrates varied among the isolated compds. that can be used as fine tools for analyzing mechanisms of drug selectivity of P-gp. These results raise the possibility of a rational control over cell sensitivity to drugs and toxins through modulation of P-gp activity by small mols.
 IT 342385-23-3
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (small mols. that dramatically alter multidrug resistance phenotype by modulating substrate specificity of P-glycoprotein)
 RN 342385-23-3 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole, 2-phenyl-9-(2-propenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS

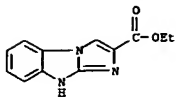
L4 ANSWER 22 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STM (Continued)
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 23 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STM
 ACCESSION NUMBER: 2001:709209 HCAPLUS
 DOCUMENT NUMBER: 136:210034
 TITLE: Synthesis, in vitro and in vivo cytotoxicity, and prediction of the intestinal absorption of substituted 2-ethoxycarbonyl-imidazo[2,1-b]benzothiazoles
 AUTHOR(S): Trapani, G.; Franco, M.; Latrofa, A.; Reho, A.; Liso, G.
 CORPORATE SOURCE: Facolta di Farmacia, Dipartimento Farmaco-Chimico, Universita degli Studi di Bari, Bari, 70125, Italy
 SOURCE: European Journal of Pharmaceutical Sciences (2001), 14(3), 209-216
 CODEN: EPSCED; ISSN: 0928-0987
 PUBLISHER: Elsevier Science Ireland Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 136:210034
 GI



AB The imidazobenzothiazole compds. together with an imidazobenzoxazole, and an imidazobenzimidazole were prepared and their cytotoxic activity evaluated at the National Cancer Institute (NCI) for testing against a panel of approx. 60 tumor cell lines. Four compds. exhibited interesting in vitro cytotoxic activity. The most active imidazobenzothiazole derivative I was further evaluated as a cytotoxic agent in the hollow fiber assay and showed a score greater than the min. values for xenograft testing together with a net cell kill. Comparison with the results displayed in the in vivo assay by standard antitumor drugs in clin. use revealed a significant in vivo activity of the benzothiazole compound COMPARE analyses for 16 of the compds. against the NCI's standard agent database show poor or no correlation, and it might suggest for these compds. a mechanism of action unrelated to that of any known drug. Furthermore, the benzothiazole I did not show significant antitumor activity in a panel of two xenotransplanted tumors (i.e. colon and non-small cell lung tumors). By computing the polar surface area of the compds. with the MAREA computer program it was established that the most active compds. should experience good intestinal permeability.
 IT 188063-33-4
 RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); PREP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (synthesis and in vitro and in vivo cytotoxicity and prediction of intestinal absorption of substituted 2-ethoxycarbonyl-imidazo[b]benzothiazoles)
 RN 188063-33-4 HCAPLUS
 CN 1H-imidazo[1,2-a]benzimidazole-2-carboxylic acid, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 23 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



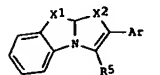
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:124140 HCAPLUS
 DOCUMENT NUMBER: 134:173021
 TITLE: Tricyclic heteroaryl compounds and vascular endothelial cell proliferation inhibitors containing the
 INVENTOR(S): Matsuhisa, Akira; Mitsumizu, Kiyohiro; Ideyama, Yukitaka; Kuromitsu, Sadao; Ota, Mitsuki
 PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001048786	A2	20010220	JP 1999-222333	19990805
PRIORITY APPL. INFO.:			JP 1999-222333	19990805
OTHER SOURCE(S):		MARPAT 134:173021		

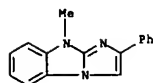
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AB The compds. I (Ar = (un)substituted (hetero)aryl; B = (un)substituted benzene ring; R5 = H, lower alkenyl, lower alkynyl, halo, NO2, cyano, OH, lower alkoxy, CO2H, lower alkoxy carbonyl, lower alkyl carbonyl, CONH2, NH2, lower alkylamino, di(lower alkyl)amino, N-heterocyclyl, lower alkanoylamino, cycloalkyl, SH, lower alkylthio, lower alkylsulfenyl, alkylsulfonyl, halo, lower alkyl which may be substituted with halo, OH, lower alkoxy, CO2H, lower alkoxy carbonyl, NH2, lower alkylamino, or di(lower alkyl)amino; if one of dotted lines is a double bond, then the other = direct bond; if X1 = S, O, or NR6 (R6 = H, lower alkyl), then X2 = N; if X1 = S, NR8 (R8 = lower alkyl), then X2 = CR7 (R7 = H, lower alkyl); if X1 = H, then X2 = S, NR6) and vascular endothelial cell proliferation inhibitors containing I or their salts are claimed. I are useful for treatment of solid carcinomas, diabetic retinopathy, etc., in which neovascularization is involved. Pretreatment of HUVEC with 2-(3-ethoxyphenyl)imidazo[2,1-b]benzothiazole monohydrochloride (preparation given) inhibited VEGF-induced proliferation.

IT 3649-20-5
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of tricyclic heteroaryl compds. as vascular endothelial cell proliferation inhibitors)
 RN 3649-20-5 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 9-methyl-2-phenyl-, monohydrobromide (9CI) (CA INDEX NAME)

L4 ANSWER 24 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



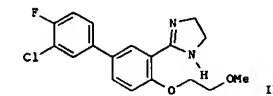
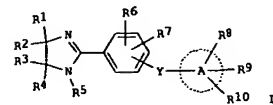
● HBr

L4 ANSWER 25 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:911225 HCAPLUS
 DOCUMENT NUMBER: 134:71593
 TITLE: Preparation of imidazoline derivatives for the treatment of diabetes, especially type II diabetes
 INVENTOR(S): Paal, Michael; Ruehter, Gerda; Schotten, Theo
 PATENT ASSIGNEE(S): Eli Lilly and Company, USA
 SOURCE: PCT Int. Appl., 143 pp.
 CODEN: P1XXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

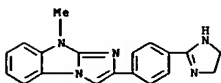
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000078726	A1	20001228	WO 2000-US11881	20000619
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM				
RW: GR, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
GB 2351081	A1	20001220	GB 1999-14222	19990618
PRIORITY APPL. INFO.:			GB 1999-14222	A 19990618
OTHER SOURCE(S):		MARPAT 134:71593		

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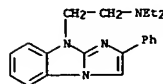
AB The title compds. [I: R1-R4 = H, alkyl; R1 and R3, together with the carbon atoms to which they are attached, combine to form a C3-7 carbocyclic ring and R2 and R4 = H, alkyl; R1 and R2, together with the carbon atom to which they are attached combine to form a C3-7 spirocarbocyclic ring and R3 and R4 = H, alkyl; R3 and R4, together with the carbon atom to which they are attached combine to form a C3-7 spirocarbocyclic ring and R1 and R2 = H, alkyl; R5 = H, alkyl, acyl, etc.]

L4 ANSWER 25 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 R6 = H, alkyl, alkoxy, etc.; R7 = H, alkyl, alkoxy, etc.; Y = NBDOMEL, NBDOD, a bond, etc.; A = a monocyclic or bicyclic ring; R8 = H, alkyl, alkenyl, etc.; R9, R10 = H, alkyl, alkoxy, etc.; useful for the treatment of diabetes, diabetic complications, metabolic disorders, or related diseases where impaired glucose disposal is present (no data), were prepd. and formulated. E.g., a multi-step synthesis of the imidazole II.HCI was given. The compds. I are effective at 0.1-5 mg/kg/day.
 IT 314239-60-69
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of imidazoline derivs. as antidiabetics)
 RN 314239-60-6 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole, 2-[4-(4,5-dihydro-1H-imidazol-2-yl)phenyl]-9-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

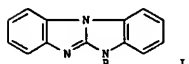
L4 ANSWER 26 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2000:859622 HCAPLUS
 DOCUMENT NUMBER: 134:216795
 TITLE: Search for antihistamine drugs among imidazobenzimidazoles and triazolobenzimidazoles
 AUTHOR(S): Spasov, A. A.; Chernikov, M. V.; Anisimova, V. A.; Kuz'menko, T. A.; Osipova, M. M.
 CORPORATE SOURCE: Volgograd State Medical Academy, Volgograd, Russia
 SOURCE: Pharmaceutical Chemistry Journal (Translation of Khimiko-Farmatsevticheski Zhurnal) (2000), 34(2), 48-52
 CODEN: PCJOAU; ISSN: 0091-150X
 PUBLISHER: Consultants Bureau
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The authors have studied the H1, H2, and H3-histamine blocking (HB) activity of derivs. belonging to tricyclic benzimidazole systems. N1 And N9-substituted imidazo[1,2-a]imidazoles, N4-substituted 1,2,4-triazolo[1,5-a]benzimidazoles, and N9-substituted 2,3-dihydroimidazo[1,2-a]benzimidazoles were the ring systems tested for histamine-blocking activity.
 IT 23572-32-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (search for antihistamine drugs among imidazobenzimidazoles and triazolobenzimidazoles)
 RN 23572-32-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



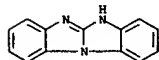
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REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 27 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2000:583058 HCAPLUS
 DOCUMENT NUMBER: 134:162964
 TITLE: Tetracyclic heteroaromatic systems. Part II.
 AUTHOR(S): Khan, Misbahul Ain; Ribeiro, Vera Lucia Teixeira
 CORPORATE SOURCE: Laboratorio de Quimica Medicinal, Universidade Federal Fluminense, Niteroi, Brazil
 SOURCE: Pakistan Journal of Scientific and Industrial Research (2000), 43(3), 168-170
 CODEN: PSIRAA; ISSN: 0030-9885
 PUBLISHER: Pakistan Council of Scientific and Industrial Research
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 134:162964
 GI

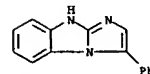


AB Benzimidazo[1,2-a]benzimidazoles (I; R = H, Me, Et) were synthesized by the trialkyl phosphite-induced deoxygenation and thermolysis of 1-(o-nitrophenyl)- and 1-(o-azidophenyl)benzimidazoles. Spectral and other properties of the products and intermediates are reported.
 IT 28890-99-59, 5H-Benzimidazo[1,2-a]benzimidazole
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 28890-99-5 HCAPLUS
 CN 5H-Benzimidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 28 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2000:511144 HCAPLUS
 DOCUMENT NUMBER: 134:141365
 TITLE: Anti HIV, antibacterial and antifungal potential of a variety of heterocyclic compounds containing nitrogen and/or sulphur
 AUTHOR(S): Sondhi, S. M.; Verma, R. P.; Singhal, Nidhi; Sharma, V. K.; Husni, C.; Vargiu, L.; Longu, S.; La Colla, P.
 CORPORATE SOURCE: Department of Chemistry, University of Roorkee, Roorkee, 247 667, India
 SOURCE: Indian Journal of Pharmaceutical Sciences (2000), 62(1), 71-76
 CODEN: IJSDOW; ISSN: 0250-474X
 PUBLISHER: Indian Pharmaceutical Association
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB 9-Acridinyl imino/amino derivs. (Ia-f, Ia-b, III, IV and V), pyrimido oxazole derivative (VIa), imidazopyrimidine thiones (VIb, VII), pyrimidoxazinethione (VIC), 1-(2-aminoaryl)-6-hydroxy-4,4,6-trimethyl-1,4,5,6-tetrahydropyrimidine-2(3H)-thiones (VIIIa-c), 1-(2-nitroaryl)-6-methoxy-6-methyl-1,4,5,6-tetrahydro pyrimidine-2-(3H) thiones (IXa,b), 1-(2-hydroxy phenyl)-4,4,6-trimethyl-1, 4-dihydropyrimidine-2(3H)-thione (X), condensed tricyclic pyrimidine derivs. (XIa-h) pyrimido anthraquinonimidazole (XII), N,N'-disubstituted thioureas (XIIIa-c), 1,2-dithia-5,8-diazacyclodeca-4,8-diene (XIV), 1,2-dithia-5,8-diazacyclodecane dihydrochloride (XV), 3-(o-aminophenyl)-2-imino-4-phenyl-4-thiazoline (XVI), 9H-imidazo[1,2-a] benzimidazoles (XVIIa-c), benzimidazole derivative (XVIII), Schiff's bases (XIX, XXa-b), 1-(2-methylamino-4-Ph thiazole)-2-hydroxy-naphthalene (XXI), compound XXII and acridone derivative XXIII were synthesized by the procedures developed earlier and were screened for anti HIV, antibacterial and antifungal activities. Compds. XVIIb and XVIIc showed antibacterial activity against Streptococcus D at concns. slightly higher than those of streptomycin (1.6 µM) and compound XV showed mild activity against Salmonella (MIC = 66 µM). When tested against yeast representatives, compound XV was active against C-neoformans (MIC = 22 µM), compds. XV and XXa showed mild activity against Candida at 66 µM but this concentration was cytotoxic for MT-4 cells. Only compound XIa was capable of protecting MT-4 cells from the cytopathic effect induced by HIV-1 (EC50 = 115 µM). All other compds. were found to be inactive.
 IT 75542-79-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (anti-HIV, antibacterial, and antifungal potential of heterocyclic compds. containing N and/or S)
 RN 75542-79-9 HCAPLUS
 CN 1H-imidazo[1,2-a]benzimidazole, 3-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 29 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:124779 HCAPLUS

DOCUMENT NUMBER: 132:265148

TITLE: Synthesis and study of the hypotensive and antiarrhythmic activity of 2,9-disubstituted 3-alkoxycarbonylimidazo[1,2-a]benzimidazoles

AUTHOR(S): Anisimova, V. A.; Kuz'menko, T. A.; Spasov, A. A.; Bocharova, I. A.; Orbinskaya, T. A.

CORPORATE SOURCE: Research Institute of Physical and Organic Chemistry, Rostov State University, Rostov-on-Don, Russia

SOURCE: Pharmaceutical Chemistry Journal (Translation of Khimiko-Farmatsevticheskii Zhurnal) (1999), 33(7), 361-365

CODEN: PCJOAU; ISSN: 0091-150X

CONSULTANTS BUREAU

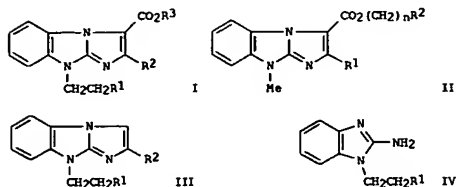
PUBLISHER: Journal

DOCUMENT TYPE: English

LANGUAGE: CASREACT 132:265148

OTHER SOURCE(S):

GI



AB A series of 3-(alkoxycarbonyl)imidazo[1,2-a]benzimidazoles, in which (dialkylamino)alkyl groups were introduced either at the 9-position of the tricyclic nucleus, e.g., I (R1 = Et2N, piperidino, morpholino; R2 = Me, Ph, 1-naphthyl; R3 = Me, Et), or at the alkoxycarbonyl group, e.g., II (n = 2, 3; R1 = Me, Ph; R2 = Et2N, piperidino, morpholino, Me2N), were prepared from the corresponding 2,9-disubstituted imidazo[1,2-a]benzimidazoles III and 1-[(dialkylamino)alkyl]-2-aminobenzimidazoles IV. The hypotensive and antiarrhythmic activities of these compds. were also studied. The effects of the most active compds., I (R1 = morpholino, R2 = R3 = Me) and II (R1 = Me; R2 = Et2N, morpholino), exceed that of the reference drug dibazole.

IT 41472-74-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and study of the hypotensive and antiarrhythmic activity of 2,9-disubstituted 3-(alkoxycarbonyl)imidazo[1,2-a]benzimidazoles)

RN 41472-74-6 HCAPLUS

CN 9H-imidazo[1,2-a]benzimidazole-3-carboxylic acid, 9-[2-(diethylamino)ethyl]-2-methyl-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 30 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:359097 HCAPLUS

DOCUMENT NUMBER: 131:165272

TITLE: The effect of compounds with antioxidant properties on blood platelet functional activity

AUTHOR(S): Spasov, A. A.; Ostrovsky, O. V.; Lvakhnenko, I. V.; Kosolapov, V. A.; Anisimova, V. A.

CORPORATE SOURCE: Department of Pharmacology, Volgograd Medical Academy, Volgograd, Russia

SOURCE: Eksperimental'naya i Klinicheskaya Farmakologiya (1999), 62(1), 38-40

CODEN: EXFA29; ISSN: 0869-2092

Izdatel'stvo Folium

PUBLISHER: Journal

DOCUMENT TYPE: Russian

AB The effect of antioxidant compds. ionol and mexidol and the new phenol derivative N9-imidazo-(1,2a)-benzimidazol (PY-185) on the functional activity of blood platelets was studied. All the compds. under study effectively inhibited blood platelet aggregation both in vitro and in administration into rats, as a result of which the blood thrombogenic potential reduced.

IT 238097-66-0, PY 185

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

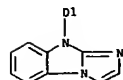
(antioxidant compds. effect on blood platelet aggregation)

RN 238097-66-0 HCAPLUS

CN Benzenediol, 9H-imidazo[1,2-a]benzimidazol-9-yl- (9CI) (CA INDEX NAME)

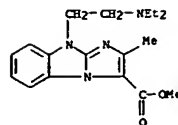


2 (D1-OH)



L4 ANSWER 29 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

(Continued)



●2 HCl

REFERENCE COUNT: 5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 31 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:242387 HCAPLUS

DOCUMENT NUMBER: 131:97250

TITLE: Correction of cardiotoxic effects of cardiac antiarrhythmics with befol, suphan, and their combinations

AUTHOR(S): Galenko-Yaroshevskii, P. A.; Khankoeva, A. I.; Uvarov, A. V.; Bartashevich, V. V.; Popov, P. B.; Sirotenko, D. V.; Boldin, V. B.

CORPORATE SOURCE: Department of Pharmacology, Kuban Medical Academy, Krasnodar, Russia

SOURCE: Bulletin of Experimental Biology and Medicine (Translation of Byulleten Eksperimental'noi Biologii i Meditsiny) (1998), 125(6), 567-572

CODEN: BEXBAN; ISSN: 0007-4888

CONSULTANTS BUREAU

PUBLISHER: Journal

DOCUMENT TYPE: English

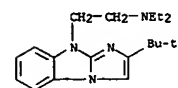
AB Antidepressant befol, non-glycoside cardiotonic suphan, and their combinations were shown to have different ability to decrease cardiotoxic (arrhythmogenic) effect of novocainamide, lidocaine, bonnacor, obsidan, cordarone, verapamil, and rhythmizadol.

IT 72025-08-2, Rhythmizadol

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (correction of cardiotoxic effects of cardiac antiarrhythmics with befol and suphan and their combinations)

RN 72025-08-2 HCAPLUS

CN 9H-imidazo[1,2-a]benzimidazole-9-ethanamine, 2-(1,1-dimethylethyl)-N,N-diethyl-, dihydrochloride (9CI) (CA INDEX NAME)

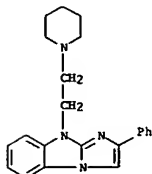


●2 HCl

REFERENCE COUNT: 16

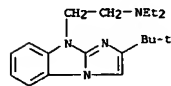
THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 32 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1999:89959 HCAPLUS
 DOCUMENT NUMBER: 130:291301
 TITLE: Dependence of the antiplatelet and antiarrhythmic activities of the benzimidazole calcium blockers on their anticalmodulin action
 AUTHOR(S): Spasov, A. A.; Larionov, N. P.; Sibiriyakova, T. B.; Verovskii, V. E.; Anisimova, V. A.; Kovalev, S. G.; Baldenkov, G. N.; Men'shikov, M. Yu.; Kuz'menko, T. A.; Kuz'menko, V. V.
 CORPORATE SOURCE: Volgograd. Med. Akad., Volgograd, Russia
 SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1998), 32(10), 22-27
 CODEN: KHFZAN; ISSN: 0023-1134
 PUBLISHER: Izdatel'stvo Folium
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB Cluster anal. of 55 benzimidazoles allows to consider the antiplatelet and antiarrhythmic activities of these calcium channel blockers as a function of their calmodulin-inhibiting action.
 IT 23572-35-2
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (antiplatelet and antiarrhythmic activities of benzimidazole calcium blockers as function of their anticalmodulin action)
 RN 23572-35-2 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 2-phenyl-9-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

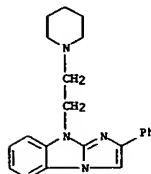
L4 ANSWER 34 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1998:731683 HCAPLUS
 DOCUMENT NUMBER: 130:133880
 TITLE: Cardiotoxic effects of the antiarrhythmic rhythmidazol and their correction by suphan, befol, and their combinations
 AUTHOR(S): Galenko-Yaroshevskii, P. A.; Skibitskii, V. V.; Boldin, V. B.; Seredenko, M. M.; Khankoeva, A. I.; Uvarov, A. V.
 CORPORATE SOURCE: Department of Pharmacology, Kuban Medical Academy, Krasnodar, Russia
 SOURCE: Bulletin of Experimental Biology and Medicine (Translation of Byulleten Eksperimental'noi Biologii i Meditsiny) (1998), Volume Date 1997, 124(12), 1189-1193
 CODEN: BEXBAN; ISSN: 0007-4888
 PUBLISHER: Consultants Bureau
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The antiarrhythmic rhythmidazol produces a cardiotoxic effect that can be corrected by suphan, befol, and their combinations, as evidenced by normalization of ultrastructural organization of cardiomyocytes and myocardial oxygen consumption by these drugs.
 IT 72025-08-2, Rhythmidazol
 RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cardiotoxic effects of antiarrhythmic rhythmidazol and their correction by suphan, befol, and their combinations)
 RN 72025-08-2 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, 2-(1,1-dimethylethyl)-N,N-diethyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

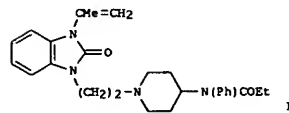
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1999:89955 HCAPLUS
 DOCUMENT NUMBER: 130:291550
 TITLE: Dependence of the spasmolytic and gastro-protective effects of benzimidazole derivatives on their anticalmodulin action
 AUTHOR(S): Spasov, A. A.; Larionov, N. P.; Sibiriyakova, T. B.; Verovskii, V. E.; Anisimova, V. A.; Dudchenko, G. P.; Baldenkov, G. N.; Men'shikov, M. Yu.
 CORPORATE SOURCE: Volgograd. Med. Akad., Volgograd, Russia
 SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1998), 32(10), 17-21
 CODEN: KHFZAN; ISSN: 0023-1134
 PUBLISHER: Izdatel'stvo Folium
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The authors studied the dependence of the spasmolytic, hypoglycemic, and gastro-protective effects of benzimidazole deriva. on their anticalmodulin action. The results showed that only compds. with high anticalmodulin activity are effective as spasmolytics and gastroprotectants.
 IT 23572-35-2
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (spasmolytic and gastro-protective effects of benzimidazole deriva. in relation to their anticalmodulin action)
 RN 23572-35-2 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 2-phenyl-9-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



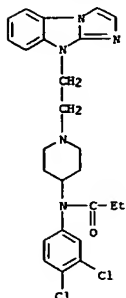
● 2 HCl

L4 ANSWER 35 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1998:20196 HCAPLUS
 DOCUMENT NUMBER: 128:162735
 TITLE: Pharmacological profile of a novel series of NK1 antagonists. In vitro and in vivo potency of benzimidazolone derivatives
 AUTHOR(S): Remond, G.; Portavin, B.; Bonnet, J.; Canet, E.; Regoli, D.; De Nanteuil, G.
 CORPORATE SOURCE: Division D of Medicinal Chemistry, Institut de Recherches Servier, Suresnes, 92150, Fr.
 SOURCE: European Journal of Medicinal Chemistry (1997), 32(11), 843-858
 CODEN: EJMCAS; ISSN: 0223-5234
 PUBLISHER: Editions Scientifiques et Medicales Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB By low throughput examination of our chemical library, I was selected as a lead NK1 antagonist with a K_i of 7.1 nM. Modifications of its structure led to the finding that the in vitro potency could be markedly enhanced by substituting the anilino Ph ring. Human binding data correlated rather well with results obtained with in vitro animal smooth muscle preps. Several agents proved to possess antinociceptive properties as exemplified in the hot-plate test in mice; one of the compound had ED50 of 0.001 and 0.3 mg/kg after i.v. and oral administrations, resp. Another compound was a potent inhibitor of SP-induced bronchoconstriction in guinea-pigs with an ED50 between 0.1 and 0.03 mg/kg i.v. Oral administration of this compound inhibited SP-induced bronchial hypersensitivity in mice, with an ID50 of around 3 mg/kg.
 IT 202858-97-7
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process) (preparation and pharmacol. profile of benzimidazolone NK1 antagonists)
 RN 202858-97-7 HCAPLUS
 CN Propanamide, N-(3,4-dichlorophenyl)-N-[1-[2-(9H-imidazo[1,2-a]benzimidazol-9-yl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 35 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



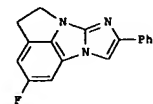
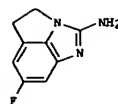
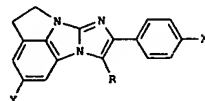
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 36 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:569198 HCAPLUS
DOCUMENT NUMBER: 127:190734
TITLE: 4,5-Dihydroimidazo[1,2-a]pyrrolo[1,2,3-cd]benzimidazole derivatives, their preparation, and their therapeutic application as anticonvulsants, anxiolytics, and hypnotics
INVENTOR(S): George, Pascal; Sevrin, Mireille; Peynot, Michel
PATENT ASSIGNEE(S): Charles; Evanno, Yannick
SOURCE: Synthelabo S. A., Fr.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2741073	A1	19970516	FR 1995-13255	19951109
FR 2741073	B1	19971212	FR 1995-13255	19951109

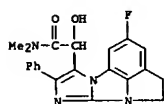
PRIORITY APPL. INFO.:
OTHER SOURCE(S): MARPAT 127:190734
GI



AB Title compds. I [Y = H, halo; X = cyano, CO₂H, CO₂Et, CONH₂, and also (when Y = halo) X = H, halo, or alkyl; R = H, CH₂CO₂R₁, CH₂CONR₂R₃; R₁, R₂, R₃ = H, alkyl] and their salts are disclosed. For instance, cyclocondensation of 5-fluoro-2,3-dihydro-1H-indol-7-amine with BrCN in aqueous Na₂CO₃ gave the intermediate pyrrolobenzimidazole derivative II.

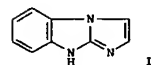
This compound underwent N-alkylation by BrCH₂CO₂Ph, followed by cyclization of the product under Dean-Stark conditions, to give title compound III. I bound to benzodiazepine receptors (α1 and α2) with IC₅₀ of 1-1000 nM.

L4 ANSWER 36 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)
and showed anticonvulsant, anxiolytic, and hypnotic activity in animal expts.
IT 194476-47-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
as (intermediate; preparation of dihydroimidazopyrrolobenzimidazole derivs. anticonvulsants, anxiolytics, and hypnotics)
RN 194476-47-6 HCAPLUS
CN Imidazo[1,2-a]pyrrolo[1,2,3-cd]benzimidazole-9-acetamide, 2-fluoro-4,5-dihydro-a-hydroxy-N,N-dimethyl-8-phenyl- (9CI) (CA INDEX NAME)



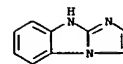
L4 ANSWER 37 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:432790 HCAPLUS
DOCUMENT NUMBER: 127:135768
TITLE: Gas-phase pyrolysis of 1-(2-azidophenyl)imidazole
AUTHOR(S): Blake, Alexander J.; Clark, Bernard A. J.; McNab, Hamish; Sommerville, Craig C.
CORPORATE SOURCE: Department of Chemistry, The University of Edinburgh, Edinburgh, EH9 3JJ, UK
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1997), (11), 1605-1608
CODEN: JCPAB4; ISSN: 0300-922X
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 127:135768
GI



AB Flash vacuum pyrolysis of the title azide gave only imidazo[1,2-a]benzimidazole (I) via highly regioselective insertion of the triplet nitrene intermediate into the 2-CN bond of the imidazole ring. The x-ray crystal structure and NMR spectroscopic properties of I are discussed in detail.

IT 247-79-0P, 1H-Imidazo[1,2-a]benzimidazole
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 247-79-0 HCAPLUS
CN 1H-Imidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 39 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1997:356395 HCAPLUS
 DOCUMENT NUMBER: 126:325517
 TITLE: Imidazobenzimidazole derivative as antiarrhythmic agent
 INVENTOR(S): Simonov, Andrej M.; Kovalev, Gennadij V.; Anisimova, Vera A.; Spasov, Aleksandr A.; Ermilova, Elvira S.; Porotnikov, Vladimir I.; Kaverina, Natalya V.; Pyatin, Boris M.; Merinova, Serafima V.; Avdyunina, Nina I.
 PATENT ASSIGNEE(S): Nauchno-Issledovatel'skij Institut Fizicheskij i Organicheskij Khimii Rostovskogo Gosudarstvennogo Universiteta, Russia; Volgogradskij Meditsinskij Institut; Nauchno-Issledovatel'skij Institut Farmakologii Ramn
 SOURCE: Russ. From: Izobreteniya 1996, (30), 146.
 CODEN: RUZKE7
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2068261	C1	19961027	RU 1983-3655901	19831103
			SU 1983-3655901	A 19831103

PRIORITY APPLN. INFO.:

AB Title only translated.

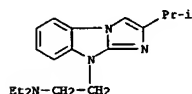
IT 189573-27-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(imidazobenzimidazole derivative as antiarrhythmic agent)

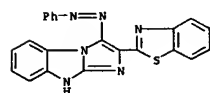
RN 189573-27-1 HCAPLUS

CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-(1-methylethyl)-, dihydrochloride (9CI) (CA INDEX NAME)



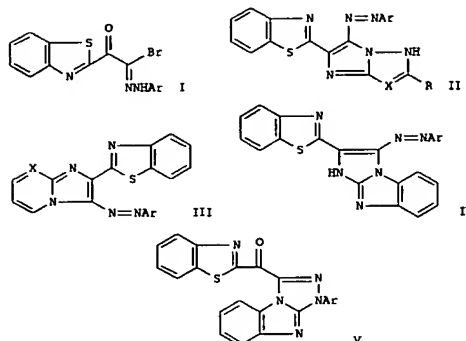
● 2 HCl

L4 ANSWER 39 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 (prepn. of imidazopyrazole, -triazole, -pyridine, -pyrimidine, -benzimidazole, and triazolobenzimidazole derivs.)
 RN 188845-61-6 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole, 2-(2-benzothiazolyl)-3-(phenylazo)- (9CI) (CA INDEX NAME)



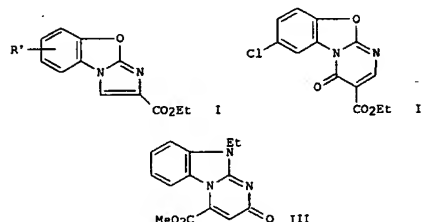
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 39 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1997:219187 HCAPLUS
 DOCUMENT NUMBER: 126:277442
 TITLE: One-pot synthesis of imidazo[1,2-b]pyrazole, imidazo[1,2-b]-1,2,4-triazole, imidazo[1,2-a]pyridine, imidazo[1,2-a]pyrimidine, imidazo[1,2-a]benzimidazole, and 1,2,4-triazolo[4,3-a]benzimidazole derivatives
 AUTHOR(S): Farag, Ahmad M.; Dawood, Kamal M.
 CORPORATE SOURCE: Fac. Sci., Univ. Cairo, Giza, Egypt
 SOURCE: Heteroatom Chemistry (1997), 8(2), 129-133
 CODEN: HETCE8; ISSN: 1042-7163
 PUBLISHER: Wiley
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB Hydrazonoyl bromides I (Ar = Ph, 4-MeC6H4, 4-ClC6H4) react with 5-amino-3-phenyl-1H-pyrazole, 5-amino-1H-1,2,4-triazole, 2-aminopyridine, 2-aminopyrimidine, and 2-aminobenzimidazole to afford the corresponding imidazo[1,2-b]pyrazoles II (X = CH, R = Ph), imidazo[1,2-b]-1,2,4-triazoles III (X = N, R = H), imidazo[1,2-a]pyridines IV (X = CH), imidazo[1,2-a]pyrimidines V (X = N), and imidazo[1,2-a]benzimidazoles IV, resp. Comps. I reacted also with 2-(methylthio)benzimidazole to give 1,2,4-triazolo[4,3-a]benzimidazole derivs. V.
 IT 188845-61-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)

L4 ANSWER 40 OF 155 HCAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1997:112751 HCAPLUS
 DOCUMENT NUMBER: 126:212114
 TITLE: Synthesis and benzodiazepine receptor binding of some imidazo-, pyrimido[2,1-b]benzoxazoles and pyrimido[1,2-a]benzimidazoles
 AUTHOR(S): Trapani, G.; Franco, M.; Latrofa, A.; Genchi, G.; Iacobazzi, V.; Ghiani, C. A.; Maciocco, E.; Liso, G.
 CORPORATE SOURCE: Dipartimento Farmaco-Chimico, Facolta di Farmacia, Universita degli Studi di Bari, Bari, 70125, Italy
 SOURCE: European Journal of Medicinal Chemistry (1997), 32(1), 83-89
 CODEN: EJMCAS; ISSN: 0223-5234
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



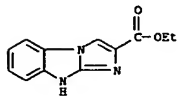
AB A series of imidazo[2,1-b]benzoxazoles I (R' = H, 6-Me, 7-Me, 6-Cl), pyrimido[2,1-b]benzoxazoles, e.g., II, and pyrimido[1,2-a]benzimidazoles, e.g., III, was synthesized and evaluated for affinity at the benzodiazepine receptor (BZR). These comps. generally possess BZR binding affinities lower than those observed for the corresponding benzothiazole analogs. However, imidazobenzoxazole I (R' = 6-Cl) (IV) possesses high binding affinity, showing an IC50 value of 77 nM. The pharmacol. profile of IV was predicted by [35S]TBPS binding as inverse agonist whereas antagonist or partial agonist activity was suggested by the GABA ratio value. Hence, a contrasting predictive capability of GABA ratio and [35S]TBPS binding was observed. Compound IV should possess partial inverse agonist activity at BZR, because its [35S]TBPS binding data is comparable to those of FG-7142.

IT 188063-33-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and benzodiazepine receptor binding affinity of imidazo/pyrimidobenzoxazoles and pyrimidobenzimidazoles)

RN 188063-33-4 HCAPLUS

CN 1H-Imidazo[1,2-a]benzimidazole-2-carboxylic acid, ethyl ester (9CI) (CA INDEX NAME)

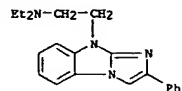
L4 ANSWER 40 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L4 ANSWER 41 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:12411 HCAPLUS
 DOCUMENT NUMBER: 126:42695
 TITLE: 9-Diethylaminoethyl-2-phenylimidazo[1,2-b]benzimidazole nitrate salt with antisecretory and antilucer activities
 INVENTOR(S): Kovalev, Gennadij V.; Spasov, Aleksandr A.; Anisimova, Vera A.; Seredenin, Sergej S.; Pyatin, Boris M.; Avdyunina, Nina I.; Sherbakova, Olga V.; Loginov, Anatolij S.; Bendikov, Eduard A.; Bakumov, Pavel A.
 PATENT ASSIGNEE(S): Nauchno-Issledovatel'skij Institut Fizicheskij i Organicheskij Khimii Rostovskogo Gosudarstvennogo Universiteta, Russia; Volgogradskij Meditsinskij Institut; Nauchno-Issledovatel'skij Institut Farmakologii; Tsentralnyj Nauchno-Issledovatel'skij Institut Gastroenterologii
 SOURCE: Russ. From: Izobreteniya 1996, (11), 136.
 CODEN: RUXKE7
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2058142	C1	19960420	RU 1991-4935357	19910517
PRIORITY APPL. INFO.: SU 1991-4935357 A 19910517				
AB Title only translated.				
IT 184882-31-3				
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
(diethylaminoethylphenylimidazobenzimidazole nitrate with antisecretory and antilucer activities)				
RN 184882-31-3 HCAPLUS				
CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, nitrate (9CI) (CA INDEX NAME)				
CM 1				
CRN 33729-71-4				
CMF C21 H24 N4				



CM 2
 CRN 7697-37-2
 CMF H N O3

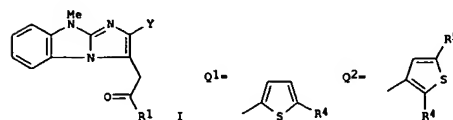
L4 ANSWER 41 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



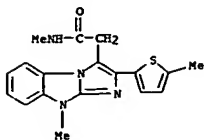
L4 ANSWER 42 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:313505 HCAPLUS
 DOCUMENT NUMBER: 124:343306
 TITLE: Preparation of benzodiazepine receptor-binding 2-thienylimidazo[1,2-a]benzimidazole-3-acetic acid-derivative pharmaceuticals
 INVENTOR(S): Sevrin, Mireille; Evanno, Yannick; George, Pascal
 PATENT ASSIGNEE(S): Synthelabo S. A., Fr.
 SOURCE: Fr. Demande, 19 pp.
 CODEN: FROXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2722500	A1	19960119	FR 1994-8712	19940713
FR 2722500	B1	19960809		
PRIORITY APPL. INFO.: FR 1994-8712 19940713				
OTHER SOURCE(S): MARPAT 124:343306				
GI				



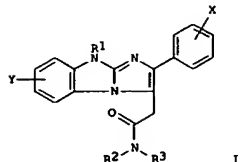
AB The title compds. [I: R1 = OH, alkoxyl, alkylamino, dialkylamino; Y = Q1, Q2; R4, R5 = (un)branched alkyl], useful as anxiolytics which bind to benzodiazepine receptors as anticonvulsants and as hypnotics, are prepared Thus, I (R1 = H2NMe, Y = Q1, R4 = Me), m.p. 248-249°, was prepared from Et 2,2-diethoxyacetate in 4 steps.
 IT 176760-35-3P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of 2-thienylimidazo[1,2-a]benzimidazole-3-acetic acid derivative pharmaceuticals)
 RN 176760-35-3 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-3-acetamide, N,9-dimethyl-2-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1996:311278 HCAPLUS
 DOCUMENT NUMBER: 124:343307
 TITLE: Preparation of benzodiazepine receptor-binding
 9H-imidazo[1,2-a]benzimidazole-3-acetamide
 pharmaceuticals
 INVENTOR(S): George, Pascal; De Peretti, Danielle; Sevrin,
 Mireille; Schmitt, Jean Paul
 PATENT ASSIGNEE(S): Synthelabo S. A., Fr.
 SOURCE: Fr. Demande, 19 pp.
 CODEN: FROXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2722501	A1	19960119	FR 1994-8713	19940713
FR 2722501	B1	19960809		

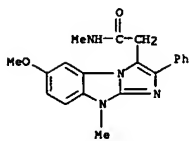
PRIORITY APPL. INFO.: MARPAT 124:343307
 OTHER SOURCE(S):
 GI



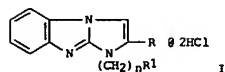
AB The title compds. (I; R1 = Me; R2, R3 = H, Me; when X = H, halogen, or Me, then Y = OH, MeO, and when X = OH, then Y = H), useful as benzodiazepine receptor-binding anxiolytics, hypnotics, anticonvulsants, and pharmaceuticals, are prepared. Thus, 6-methoxy-N,N,9-trimethyl-2-(4-methylphenyl)-9H-imidazo[1,2-a]benzimidazole-3-acetamide was reacted with BBc3 and the reaction mixture neutralized with aqueous NaHCO3, producing I (R1-R3 = Me, X = 4-Me, Y = 6-OH), m.p. 268.6-269.9°.

IT 176727-72-3P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PRAEP (Preparation); USES (Uses) (preparation of benzodiazepine receptor-binding 9H-imidazo[1,2-a]benzimidazole-3-acetamide pharmaceuticals)

RN 176727-72-3 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-3-acetamide, 6-methoxy-N,N-dimethyl-2-phenyl- (9CI) (CA INDEX NAME)



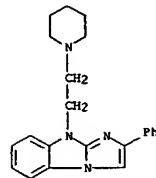
ACCESSION NUMBER: 1996:26940 HCAPLUS
 DOCUMENT NUMBER: 124:202110
 TITLE: 2-Aryl-1-[(dialkylamino)alkyl]imidazo[1,2-a]benzimidazoles: synthesis and calcium ion antagonism
 AUTHOR(S): Anisimova, V. A.; Spasov, A. A.; Levchenko, M. V.; Aleksandrova, E. A.
 CORPORATE SOURCE: NII Fiz. Org. Khim., Rostov-on-Don, Russia
 SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1995), 29(10), 17-19
 CODEN: KHFZAN; ISSN: 0023-1134
 PUBLISHER: Meditsina
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



AB Title compds. I (R = 1-naphthyl, (un)substituted phenyl; n = 2, 3; R1 = piperidino, morpholino, NET2) were prepared in several steps from 2-[(hydroxyalkyl)amino]benzimidazoles. The activities of I as calcium ion antagonists were determined

IT 23572-35-2
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (calcium ion antagonism of)

RN 23572-35-2 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 2-phenyl-9-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

L4 ANSWER 45 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:997842 HCAPLUS

DOCUMENT NUMBER: 124:176096

TITLE: Preparation of 5,6-dihydro-4H-imidazo[2',1':2,3]imidazo[4,5,1-ij]quinoline and 4,5-dihydroimidazo[1,2-a]pyrrolo[1,2,3-cd]benzimidazole anticonvulsants and anxiolytics

INVENTOR(S): George, Pascal; Sevrin, Mireille; Peynot, Michel

PATENT ASSIGNEE(S): Synthelabo S. A., Fr.

SOURCE: Eur. Pat. Appl., 18 pp.

COVEN: EPXXXX

DOCUMENT TYPE: Patent

LANGUAGE: French

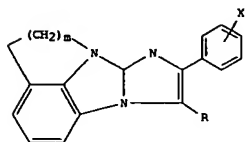
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 682025	A1	19951115	EP 1995-401014	19950503
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
FR 2719843	A1	19951117	FR 1994-5715	19940510
FR 2719843	B1	19960607		
CA 2148951	AA	19951111	CA 1995-2148951	19950509
FI 9502249	A	19951111	FI 1995-2249	19950509
NO 9501811	A	19951113	NO 1995-1811	19950509
AU 9517935	A1	19951116	AU 1995-17935	19950509
CN 1115761	A	19960131	CN 1995-105469	19950509
JP 08053450	A2	19960227	JP 1995-110538	19950509
ZA 9503750	A	19960402	ZA 1995-3750	19950509
US 5512590	A	19960430	US 1995-437053	19950509
HU 72666	A2	19960528	HU 1995-1369	19950509
IL 113672	A1	19971120	IL 1995-113672	19950509
PRIORITY APPLN. INFO.: FR 1994-5715				A 19940510

OTHER SOURCE(S): MARPAT 124:176096

GI



AB The title compds. [I: R = H, CH₂CO₂R₁, CH₂CON(R₂)R₃; R₁-R₃ = H, alkyl; X = H, F, Cl, alkyl, alkoxy, OH; n = 1, 2] [e.g., 8-(4-fluorophenyl)-N-methyl-4,5-dihydroimidazo[1,2-a]pyrrolo[1,2,3-cd]benzimidazole-9-acetamide], useful as anticonvulsants, anxiolytics, and hypnotics, are prepared

IT 173666-77-89

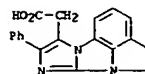
L4 ANSWER 45 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

[prepn. of 5,6-dihydro-4H-imidazo[2',1':2,3]imidazo[4,5,1-ij]quinoline and 4,5-dihydroimidazo[1,2-a]pyrrolo[1,2,3-cd]benzimidazole anticonvulsants and anxiolytics]

RN 173666-77-8 HCAPLUS

CN Imidazo[1,2-a]pyrrolo[1,2,3-cd]benzimidazole-9-acetic acid, 4,5-dihydro-8-phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 46 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:789055 HCAPLUS

DOCUMENT NUMBER: 124:8695

TITLE: Acetic anhydride-induced cyclization of quaternary 1,2-diaminobenzimidazolium salts containing an activated methylene group at position 3

AUTHOR(S): Kuz'menko, T. A.; Kuz'menko, V. V.; Anisimova, V. A.

CORPORATE SOURCE: NII Fiz. Org. Khim., Rostov-on-Don, Russia

SOURCE: Zhurnal Organicheskoi Khimii (1995), 31(1), 106-12

CODEN: ZORXAE; ISSN: 0514-7492

PUBLISHER: Nauka

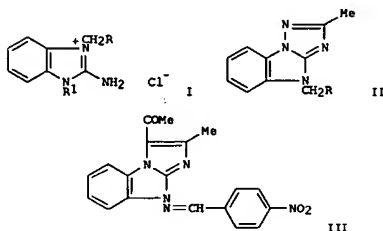
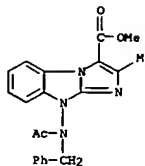
DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 124:8695

GI

L4 ANSWER 46 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



AB Boiling title salts I (R = COMe, COOEt, CN; R₁ = NH₂) in Ac₂O containing K₂CO₃

gave triazolobenzimidazoles (II, same R). Similar treatment of I (R = COMe, COOEt, CN; R₁ = arylideneamino) gave imidazobenzimidazoles such as III.

IT 171414-05-4P

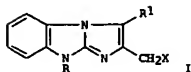
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

[acetic anhydride-induced cyclization of diaminobenzimidazolium salts containing an activated methylene group]

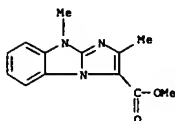
RN 171414-05-4 HCAPLUS

CN 9H-imidazo[1,2-a]benzimidazole-3-carboxylic acid, 9-[acetyl(phenylmethyl)amino]-2-methyl-, methyl ester (9CI) (CA INDEX NAME)

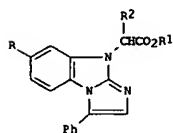
L4 ANSWER 47 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:376571 HCAPLUS
 DOCUMENT NUMBER: 123:111934
 TITLE: Investigations of imidazo[1,2-a]benzimidazole derivatives. 26. 2-(Halomethyl)imidazo[1,2-a]benzimidazoles and their reactivity
 AUTHOR(S): Anisimova, V. A.; Lukova, O. A.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, Russia
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1994), (3), 369-76
 CODEN: KGSSAQ; ISSN: 0132-6244
 PUBLISHER: Latviiskii Institut Organicheskogo Sintez
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



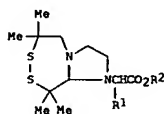
AB Title compds. I (R = Me, CH2Ph; R1 = H; X = Cl) were prepared by cyclocondensation of 1-methyl- and 1-benzyl-2-benzimidazolamine with 1,3-dichloroacetone. I (R = Me, CH2Ph; R1 = COMe, COOMe; X = Br) were prepared by radical bromination of I (R = Me, CH2Ph; R1 = COMe, COOMe; X = H). The 2-(halomethyl) compds. underwent facile nucleophilic substitution of the halogen atom.
 IT 40783-82-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation and reactions of (halomethyl)imidazobenzimidazoles)
 RN 40783-82-2 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-3-carboxylic acid, 2,9-dimethyl-, methyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 49 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:237240 HCAPLUS
 DOCUMENT NUMBER: 122:133121
 TITLE: Synthesis, isomer identification by 2D-NMR and antiinflammatory evaluation of some
 9H-imidazo[1,2-a]benzimidazole and perhydroimidazo[1,2-d][1,2,4]dithiazepine derivatives
 AUTHOR(S): Sondhi, S. M.; Magan, Archana; Mahesh, V. X.; Srimal, R. C.; Goel, A. K.
 CORPORATE SOURCE: Dep. Chem., Univ. Roorkee, Roorkee, 247 667, India
 SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1994), 33B(12), 1144-9
 CODEN: IJSBDB; ISSN: 0376-4699
 PUBLISHER: Publications & Information Directorate, CSIR
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI

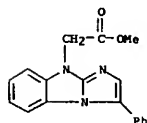


I

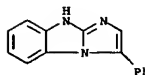


II

AB Condensation of 3-phenyl-1H-imidazo[1,2-a]benzimidazole derivs. and perhydro-1,1,4,4-tetramethylimidazo[1,2-d][1,2,4]dithiazepine with 2-bromopropanoates gave the corresponding esters I (R = H, Me, OMe) (and regioisomer) and imidazo[2,1-d][1,2,5]dithiazepineacetates II (R1 = H, Me; R2 = Me, Et). The antiinflammatory evaluation of I and II was carried out.
 IT 161085-97-8P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREF (Preparation)
 (preparation of inflammation inhibitors
 imidazo[1,2-a]benzimidazoleacetates)
 RN 161085-97-8 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-acetic acid, 3-phenyl-, methyl ester (9CI) (CA INDEX NAME)



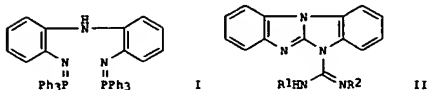
L4 ANSWER 48 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:265539 HCAPLUS
 DOCUMENT NUMBER: 122:122550
 TITLE: Anti-amoebic and anthelmintic evaluation of heterocyclic compounds containing nitrogen and/or sulfur
 AUTHOR(S): Sondhi, S. M.; Sahu, R.; Magan, Archana; Ghosh, D. K.; Mukhopadhyay, R. M.; Chatterjee, G. K.; Das, A. K.; Chaudhuri, S. K.
 CORPORATE SOURCE: Department Chemistry, University Roorkee, Roorkee, 247 667, India
 SOURCE: Indian Drugs (1994), 31(7), 317-20
 CODEN: INDRBA; ISSN: 0019-462X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Twenty two heterocyclic compds. belonging to various heterocyclic ring systems containing nitrogen and/or sulfur have been screened for anti-amoebic (E. histolytica) and anthelmintic (A. ceylanicum, N. dubius & H. nana) activity in vitro. Two compds. i.e. 2-imino-3-(2-methyl-6'-nitrophenyl)-4-phenyl-4-thiazoline and 3,3,10,10-tetramethyl-1,2-dithia-5,8-diazacyclodecane dihydrochloride showed in vitro anti-amoebic activity at 100 µg/mL and one compound i.e. 3-(o-amino phenyl)-2-imino-4-phenyl-4-thiazoline showed in vivo anthelmintic (A. ceylanicum) activity at 230 mg/kg p.o.
 IT 75542-79-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (anti-amoebic and anthelmintic evaluation of heterocyclic compds. containing nitrogen and/or sulfur)
 RN 75542-79-9 HCAPLUS
 CN 1H-imidazo[1,2-a]benzimidazole, 3-phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 49 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L4 ANSWER 50 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:63624 HCAPLUS
 DOCUMENT NUMBER: 122:10006
 TITLE: Synthetic applications of C,C-bis(iminophosphorane)s: preparation of [5+5] rigid bicyclic guanidines and 1,3,6-benzothiadiazepino[3,2-a]benzimidazole derivatives
 AUTHOR(S): Molina, Pedro; Lidon, M. Josefa; Tarraga, Alberto
 CORPORATE SOURCE: Fac. Quim., Univ. de Murcia, Murcia, E-30071, Spain
 SOURCE: Tetrahedron (1994), 50(33), 10029-36
 CODEN: TETRAAB; ISSN: 0040-4020
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI

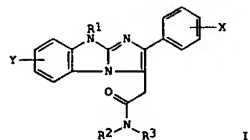


AB Za Wittig-type reaction of bis(iminophosphorane) I [i.e., bis(phosphoranylidene)amino]diphenylamine], derived from bis(2-aminophenyl)amine with two equivalent of isocyanate directly provided benzimidazo[1,2-a]benzimidazole derivs. II (R1, R2 = (un)substituted Ph, etc.). However, the reaction with one equivalent of isocyanate or carbon disulfide afforded C-aryl iminophosphoranes, derived from a 1-phenylbenzimidazole ring, which underwent cyclization by the action of one equivalent of isocyanate to give the [5+5] rigid bicyclic guanidines II or
 IT 1,3,6-benzothiadiazepino[3,2-a]benzimidazoles.
 159528-55-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 159528-55-9 HCAPLUS
 CN 5H-Benzimidazo[1,2-a]benzimidazole-5-carboximidamide, N,N'-bis(4-methylphenyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 51 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

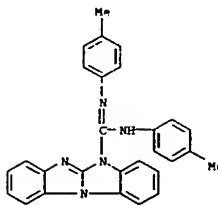
ACCESSION NUMBER: 1994:557646 HCAPLUS
 DOCUMENT NUMBER: 121:157646
 TITLE: 9H-imidazo[1,2-a]benzimidazoles with GABA activity.
 INVENTOR(S): George, Pascal; De Peretti, Danielle; Roy, Jocelyne;
 Schmitt, Jean-Paul; Sevrin, Mireille
 PATENT ASSIGNEE(S): Synthelabo S. A., Fr.
 SOURCE: Eur. Pat. Appl., 31 pp.
 CODEN: EPOXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 607076	A1	19940720	EP 1994-400057	19940111
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
FR 2700544	A1	19940722	FR 1993-337	19930115
FR 2700544	B1	19950217		
FR 2707987	A1	19950127	FR 1993-9013	19930722
FR 2707987	B1	19950908		
CA 2113490	AA	19940716	CA 1994-2113490	19940114
FI 9400186	A	19940716	FI 1994-186	19940114
NO 9400130	A	19940718	NO 1994-130	19940114
ZA 9400291	A	19940817	ZA 1994-291	19940114
JP 06271575	A2	19940927	JP 1994-2463	19940114
CN 1097743	A	19950125	CN 1994-100607	19940114
AU 9453177	A1	19950525	AU 1994-53177	19940114
AU 665137	B2	19951214		
HU 70407	A2	19951030	HU 1994-109	19940114
US 5466706	A	19951114	US 1994-180998	19940114
PRIORITY APPLN. INFO.:			FR 1993-337	A 19930115
			FR 1993-9013	A 19930722
OTHER SOURCE(S):	MARPAT	121:157646		
GI				



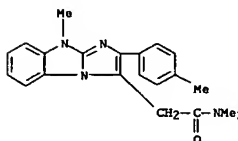
AB The title compds. [I: R1 = H, C1-3 alkyl, acetyl, PhCH2, etc.; R2, R3 = H C1-5 (un)branched (un)substituted alkyl, etc.; X = H, F, Cl, Br, C1-3 alkyl, CF3, etc.; Y = H, F, Cl, Br, C1-4 alkyl, CF3, CF3O, MeO], useful for the treatment of illnesses due to disorders in the transmission of GABA (no data), are prepared. Thus, I (R1 = R2 = X = Y = H, R3 = Me), m.p. 316-321° (decomposition), was prepared
 IT 157498-04-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

L4 ANSWER 50 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L4 ANSWER 51 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

(Reactant or reagent)
 (prepn. and reaction of, in prepn. of imidazobenzimidazoles having GABA activity)
 RN 157498-04-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-3-acetamide, N,N,9-trimethyl-2-(4-methylphenyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 52 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:245099 HCAPLUS

DOCUMENT NUMBER: 120:245099

TITLE: Benzimidazole derivatives and analogs with antidiabetic and platelet antiaggregant activity, and their preparation and pharmaceutical compositions

INVENTOR(S): Anisimova, Vera Alekseevna; Levchenko, Margarita Valentinovna; Korochina, Tatyana Borisovna; Spasov, Alexander Alexeyevich; Kovalev, Sergei Gennadyevich; Dudchenko, Galina Petrovna

PATENT ASSIGNEE(S): Adir et Cie., Fr.

SOURCE: Eur. Pat. Appl., 66 pp.

CODEN: EPXDDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

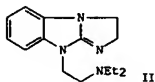
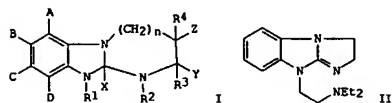
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 571253	A1	19931124	EP 1993-401239	19930514
EP 571253	B1	19981104		
FR 2691462	A1	19931126	FR 1992-6036	19920519
FR 2691462	B1	19950609		
FR 2694293	A1	19940204	FR 1992-9488	19920731
FR 2694293	B1	19941007		
AT 172975	E	19981115	AT 1993-401239	19930514
ES 2126636	T3	19990401	ES 1993-401239	19930514
CA 2096475	AA	19931120	CA 1993-2096475	19930518
AU 9338608	A1	19931125	AU 1993-38608	19930518
AU 656466	B2	19950202		
JP 06087859	A2	19940329	JP 1993-151016	19930518
JP 2506263	B2	19960612		
US 5623073	A	19970422	US 1993-63531	19930518
ZA 9303509	A	19931210	ZA 1993-3509	19930519
US 5639756	A	19970617	US 1994-330903	19941028
			FR 1992-6036	A 19920519
			FR 1992-9488	A 19920731

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 120:245099

GI



AB Members of claimed title compds. I [n = 0, 1; A, B, C, D = H, halo, alkyl, alkoxy, OH, CF₃, hydroxyalkyl; Y, Z = H; or YZ = bond; XR1 or XR2 = bond,

L4 ANSWER 53 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:549427 HCAPLUS

DOCUMENT NUMBER: 119:149427

TITLE: Benzimidazolinoimidazole compounds as photographic couplers

INVENTOR(S): Ikesu, Satoru; Kita, Hiroshi; Kaneko, Yutaka

PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan

SOURCE: Jpn. Kokai Tokyo Koho, 15 pp.

CODEN: JPOKAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

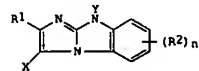
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05107705	A2	19930430	JP 1991-296544	19911017
			JP 1991-296544	19911017

PRIORITY APPLN. INFO.:

GI



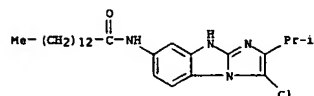
AB Claimed are photog. couplers represented by I. For I, R1, R2, Y = H or substituent; n = 0 to 4; X = H or group to be released upon reaction with an oxidized color developing agent. The use of the title magenta couplers in photog. materials gives stable images.

IT 149815-19-0

RL: USES (Uses)
(magenta coupler, for photog. material)

RN 149815-19-0 HCAPLUS

CN Tetradeccanamide, N-[3-chloro-2-(1-methylethyl)-1H-imidazo[1,2-a]benzimidazol-7-yl]- (9CI) (CA INDEX NAME)



L4 ANSWER 52 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

and other group (R1 or R2) = (un)substituted aminoalkyl, aryloalkyl, arylhydroxyalkyl, phenylalkyl, naphthylalkyl; R3 = H, alkyl, (un)substituted Ph, naphthyl, heteroaryl; R4 = H, (un)substituted aminoalkyl, aminoalkoxycarbonyl, acryl, heteroacryl; with many addnl. dependencies and provisos] were prepd. in 71 synthetic examples, mostly as salts, with the corresponding specific free bases also claimed. For example, 2-amino-1-[2-(diethylamino)ethyl]benzimidazole underwent N-alkylation at the 3-position by ClCH₂CH₂OH (90% yield), and treatment of the resulting alc. with SOCl₂ gave the chloroethyl imine 1-[2-(diethylamino)ethyl]-2-imino-3-(2-chloroethyl)benzimidazole-ZHCl (100%). Cyclization of the latter as the free base in xylene (92%) gave title compd. II, isolated as the di-HCl salt. Tests in rats showed I to have hypoglycemic activity comparable to gliclazide, lasting more than 12 h. I showed ID50 of < 10⁻⁴ M for inhibition of ADP-induced aggregation of rabbit platelets in vitro, but showed no significant antihypertensive effects in rats. Acute oral toxicity in mice was also said to be very low.

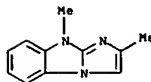
IT 28992-71-4, 2,9-Dimethylimidazo[1,2-a]benzimidazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(N-acylation of, in preparation of imidazobenzimidazole antidiabetics)

RN 28992-71-4 HCAPLUS

CN 9H-Imidazo[1,2-a]benzimidazole, 2,9-dimethyl- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 54 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:224482 HCAPLUS

DOCUMENT NUMBER: 118:224482

TITLE: Spectrochemical characteristics of symmetrical monomethinecyanines based on pyrrolo- and imidazo[1,2-a]benzimidazole

AUTHOR(S): Chernoviyants, M. S.; Askalepova, O. I.; Anisimova, V.

A.; Bagdasarov, K. N.

CORPORATE SOURCE: Rostov. Univ., Rostov, Russia

Ukrainskii Khimicheskii Zhurnal (Russian Edition)

(1992), 58(3), 257-61

CODEN: UKZHAI; ISSN: 0041-6045

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The electron d. of ground and 1st excited states of the title dyes were calculated. The nature of the long-wavelength absorption maximum was

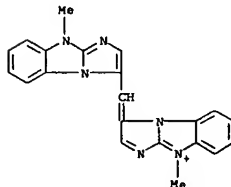
determined and substituent effects on its position and intensity were examined. Exptl. data were tabulated with respect to the possible use of these dyes as reagents for extraction-spectrophotometric determination of Au and Tl. They include absorption maximum and molar absorptivity of the dyes and their tetrachloroaurate and tetrachlorothallate counterparts, hydration and protonation pK of the dyes, and stability consts. of the tetrachloroaurate and tetrachlorothallate counterparts.

IT 92587-15-0

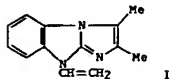
RL: ANST (Analytical study)
(electronic structure and molar absorptivity of)

RN 92587-15-0 HCAPLUS

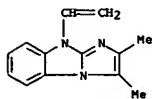
CN 3H-Imidazo[1,2-a]benzimidazolium, 9-methyl-3-[(9-methyl-9H-imidazo[1,2-a]benzimidazol-3-yl)methylene]-, iodide (9CI) (CA INDEX NAME)



L4 ANSWER 55 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1992:571314 HCAPLUS
 DOCUMENT NUMBER: 117:171314
 TITLE: 2-Aminobenzimidazole in reaction with acetylene
 AUTHOR(S): Baikalova, L. V.; Domnina, E. S.; Afonin, A. V.
 CORPORATE SOURCE: Sib. Dep., Inst. Org. Chem., Irkutsk, 664033, Russia
 SOURCE: Izvestiya Akademii Nauk, Seriya Khimicheskaya (1992), (3), 749-51
 CODEN: IASKEA; ISSN: 0002-3353
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI

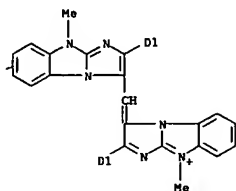


AB The title reaction under pressure gave, depending on the reaction conditions, 1-vinyl-2-amino- or 1,3-divinyl-2-iminobenzimidazole. In aqueous dioxane, 1,3-divinylbenzimidazol-2-one was isolated along with the monovinyl derivative of the title compound. Cyclization of the divinyl derivative of the title imidazole with acetylene gave 9-vinyl-1,2-dimethylimidazo[1,2-a]benzimidazole (I).
 IT 139294-60-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 139294-60-3 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 9-ethenyl-2,3-dimethyl- (9CI) (CA INDEX NAME)



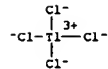
L4 ANSWER 56 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

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CM 2

CRN 18616-42-7
 CMF C14 T1
 CCI CCS

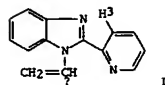


L4 ANSWER 56 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1992:206845 HCAPLUS
 DOCUMENT NUMBER: 116:206845
 TITLE: Solvent extraction-photometric determination of thallium(III) by using cyanine dyes of pyrrolo- and imidazo[1,2-a]benzimidazole type
 AUTHOR(S): Chernov'yants, M. S.; Askalepova, O. I.; Anisimova, V. A.; Bagdasarov, K. N.; Evlashenkova, I. V.
 CORPORATE SOURCE: Rostov-on-Don State Univ., Rostov-on-Don, USSR
 SOURCE: Zhurnal Analiticheskoi Khimii (1991), 46(11), 2214-17
 CODEN: ZAKHAB; ISSN: 0044-4502
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB Conditions were studied for the formation and solvent extraction of ion pairs of tetrachlorothallate(III) with sym. monomethinecyanine dyes based on pyrrolo- and imidazo[1,2-a]benzimidazole. A highly selective and sensitive extraction-photometric method was developed for the determination of thallium(III). H was used for determining Tl in Mg alloy and rainwater samples.
 IT 139642-34-5
 RL: ANST (Analytical study) (formation constant and molar absorptivity of)
 RN 139642-34-5 HCAPLUS
 CN 3H-Imidazo[1,2-a]benzimidazolium, 9-methyl-3-[[9-methyl-2-(nitrophenyl)-9H-imidazo[1,2-a]benzimidazol-3-yl]methylene]-2-(nitrophenyl)-, (7-4)-tetrachlorothallate(1-) (9CI) (CA INDEX NAME)
 CM 1
 CRN 139642-33-4
 CMF C33 H23 N8 O4
 CCI IDS

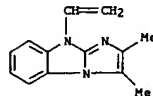
PAGE 1-A



L4 ANSWER 57 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1992:105525 HCAPLUS
 DOCUMENT NUMBER: 116:105525
 TITLE: Intramolecular specific C-H...N interactions with participation of a nitrogen atom of a pyridine ring, amino, and imino groups in 2-substituted 1-vinylbenzimidazoles according to proton and carbon-13 NMR data
 AUTHOR(S): Afonin, A. V.; Baikalova, L. V.; Domnina, E. S.
 CORPORATE SOURCE: Irkutsk Inst. Org. Chem., Irkutsk, USSR
 SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1991), (12), 2786-91
 CODEN: IASKA6; ISSN: 0002-3353
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



AB The double intramol. specific C-H...N interaction in pyridylvinylbenzimidazole (I) exists between a-H of vinyl group and H3 atom of pyridine ring and nitrogen atoms of pyridine and benzimidazole rings, resp. No intramol. interaction were observed between hydrogen atoms of vinyl group and nitrogen of amino group in 1-vinyl-2-aminobenzimidazole. The specific interaction of N atom of imino group and 9-cis hydrogen of vinyl group in 1,3-divinyl-2-iminobenzimidazole is considerably weakened by degenerate tautomeric equilibrium
 IT 139294-60-3
 RL: PRP (Properties) (NMR of, intramol. specific carbon-hydrogen-nitrogen interaction in relation to)
 RN 139294-60-3 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 9-ethenyl-2,3-dimethyl- (9CI) (CA INDEX NAME)



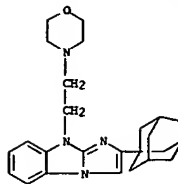
L4 ANSWER 58 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1991:464767 HCAPLUS
 DOCUMENT NUMBER: 115:64767
 TITLE: Dihydrochlorides of 9-substituted 2-(1-adamantyl)imidazo[1,2-a]benzimidazoles displaying immunodepressing activity
 INVENTOR(S): Avdyunina, N. I.; Anisimova, V. A.; Astakhova, L. I.; Klimova, N. V.; Kovalev, I. E.; Pyatin, B. M.; Shipulina, N. V.
 PATENT ASSIGNEE(S): Scientific-Research Institute of Pharmacology, Academy of Medical Sciences, U.S.S.R., USSR; Scientific-Research Institute of Biological Testing of Chemical Compounds, Rostov State University
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret. 1990, (42), 257. CODEN: URODAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 1143039	A1	19901115	SU 1983-3669438	19831206
PRIORITY APPLN. INFO.:			SU 1983-3669438	19831206
OTHER SOURCE(S):	CASREACT	115:64767		
GI				



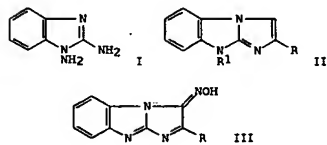
AB The title compds. I (R = Et2NCH2CH2, 2-morpholinoethyl) have immunodepressive action.
 IT 129625-57-6
 RL: BIOL (Biological study)
 (as immunodepressant)
 RN 129625-57-6 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole, 9-[2-(4-morpholinyl)ethyl]-2-tricyclo[3.3.1.1.3,7]dec-1-yl-, dihydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 58 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

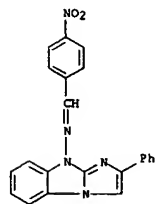


L4 ANSWER 59 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

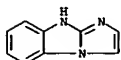
L4 ANSWER 59 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1991:207126 HCAPLUS
 DOCUMENT NUMBER: 114:207126
 TITLE: Synthesis of 9-aminoimidazo[1,2-a]benzimidazoles and their deamination
 AUTHOR(S): Kuz'menko, T. A.; Kuz'menko, V. V.; Pozharskii, A. F.; Anisimova, V. A.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, 344104, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1990), (11), 1517-23
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 114:207126
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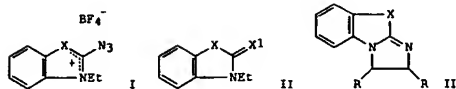
AB The reaction of diaminobenzimidazole I with XCH2COR (X = Cl, Br; R = Me, CH3, Ph, p-MeOC6H4) gives benzimidazoles II (R1 = NH2). II (R1 = NH2) can be easily deaminated by KOH in MeSOH to give II (R1 = H). The reaction of II (R1 = H) with HNO2 gives nitroso derivs. III, which were shown to exist predominantly as hydroxyimino tautomers.
 IT 133638-50-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and deamination of)
 RN 133638-50-3 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazol-9-amine, N-[(4-nitrophenyl)methylene]-2-phenyl- (9CI) (CA INDEX NAME)



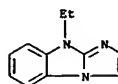
L4 ANSWER 60 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1991:156579 HCAPLUS
 DOCUMENT NUMBER: 114:156579
 TITLE: Effects of imidazo[1,2-a]benzimidazole derivatives on gastric secretion and the antilucer action
 AUTHOR(S): Spasov, A. A.; Kovalev, G. V.; Bakumov, P. A.; Reshetov, M. E.; Anisimova, V. A.; Avdyunina, N. I.
 CORPORATE SOURCE: Dep. Pharmacol., Med. Inst., Volgograd, 400066, USSR
 SOURCE: Farmakologiya i Toksikologiya (Moscow) (1990), 53(4), 30-3
 CODEN: FATQAO; ISSN: 0014-8318
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB Expts. on rats showed that of 16 studied imidazo [1,2-a] benzimidazole deriva. only the compds. with Ph at C-2 and a N-containing radical at N-9 inhibit gastric acid secretion. The binding of a methoxy group to Ph, replacement by its adamantyl, displacement of the N-containing substituent to N-1 or its substitution were found to decrease or stop the inhibiting action of these substances on gastric parietal cells. Dihydrochloride of 2-phenyl-9-(β -diethylaminoethyl)imidazo[1,2-a]benzimidazole was more potent than cimetidine and omeprazole in inhibiting gastric acid secretion and peptin output, and in exerting an antilucer action.
 IT 247-79-00, 1H-imidazo[1,2-a]benzimidazole, derivs.
 RL: BIOL (Biological study)
 (antisecretory and antilucer activity of, structure in relation to)
 RN 247-79-0 HCAPLUS
 CN 1H-imidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



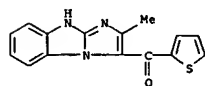
L4 ANSWER 61 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1991:42629 HCAPLUS
 DOCUMENT NUMBER: 114:42629
 TITLE: Azidinium salts. 24. Thermolysis of heterocyclic azidinium tetrafluoroborates
 AUTHOR(S): Huys-Francotte, Martine; Balli, Heinz
 CORPORATE SOURCE: Inst. Farbenchem., Univ. Basel, Basel, CH-4056, Switz.
 SOURCE: Helvetica Chimica Acta (1990), 73(6), 1679-84
 CODEN: HCACAV; ISSN: 0018-019X
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 GI



AB Thermolysis of heterocyclic azidinium salts was examined, and reaction mechanisms were discussed. E.g., azidobenzimidazolium tetrafluoroborate I (X = NET) underwent thermolysis to give hydrolysis product II (X1 = O), imine II (X1 = NH), and III (RR = double bond; R = H). Azidobenzothiazolium tetrafluoroborate I (X = S) underwent thermolysis to give III (X = S, RR = double bond), imine II (X = S, X1 = NH), and hydrolysis product II (X = S, X1 = O). Products were isolated by GC/MS.
 IT 131537-30-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 131537-30-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole, 9-ethyl- (9CI) (CA INDEX NAME)



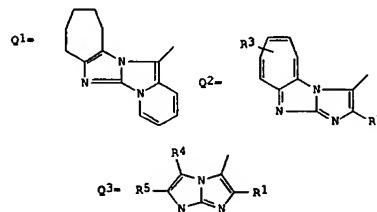
L4 ANSWER 62 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1991:31822 HCAPLUS
 DOCUMENT NUMBER: 114:31822
 TITLE: Inhibition of steady-state dissolution of nickel-zinc alloys
 AUTHOR(S): Ekilik, V. V.; Favrealeva, V. A.; Berezhnaya, A. G.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Zashchita Metallor (1990), 26(5), 842-6
 CODEN: ZAMEAS; ISSN: 0044-1856
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The inhibitor effects were compared in the selective and nonselective dissoln. of Ni, Zn, and Zn-Ni alloys (with 50, 58, 72, 96 mol% Ni) in aqueous solns. of 1M LiCl + 0.01M HCl, with some organic inhibitors. Steady-state anodic polarization curves and partial dissoln. curves of the above metals and alloys were plotted. Besides Ph(CH2)COOH, the inhibitors of the type: 5-substituted-2-methylpyrimidines (I); R2TeI2; bis(2-aminophenyl)dithalluride; 2,6-disubstituted pyranium perchlorate, and (II) were tested, where the substituents (R) are not defined. The dissoln. of Zn and the alloys in the absence of inhibitors is determined by the kinetics of Ni dissoln., which corresponds to the basic principles of steady-state dissoln. of the binary alloys. The ratio of the partial dissoln. rates of the components without an inhibitor has a substantial effect. The action of surfactants on the anodic dissoln. of Zn is not the determining factor of their influence on the ionization of Zn from the alloys. Thus, inhibition of Zn dissoln. from alloys is observed in the presence of surfactants which stimulate the dissoln. of pure Zn (R2TeI2, where R is not defined) and bis(2-aminophenyl)dithalluride). The dependence is shown of the formation constant on the nature of the inhibitor and the composition of the alloy (E° = 0.0 V). During the transition from the cationic-mol. additive II to the mol. additive R2TeI2 and the anionic-mol. additive Ph(CH2)COOH, a reversal in the sign of β is observed. The sensitivity of the protective action of additives R2TeI2 and II to a change in the potential increases upon decreasing [Ni]0 in the alloy. In the case of the anionic-mol. additive, β is practically independent of the alloy composition.
 IT 127323-72-2D, derivs
 RL: USES (Uses)
 (corrosion inhibitors, for nickel-zinc alloys in acid chloride solns.)
 RN 127323-72-2 HCAPLUS
 CN Methanone, (2-methyl-1H-imidazo[1,2-a]benzimidazol-3-yl)-2-thienyl- (9CI) (CA INDEX NAME)



L4 ANSWER 63 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1990:61977 HCAPLUS
 DOCUMENT NUMBER: 113:211977
 TITLE: Preparation of acylthioimidazoimidazoles and analogs as antilucer agents
 INVENTOR(S): Tomiyama, Tsuyoshi; Tomiyama, Akira; Shirai, Tadashi; Wakabayashi, Shuichi; Kawai, Tomoyuki; Ueyama, Naoto; Sonegawa, Motoharu
 PATENT ASSIGNEE(S): Kotobuki Seiyaku Co., Ltd., Japan
 SOURCE: Ger. Offen., 19 pp.
 CODEN: GWXEXX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

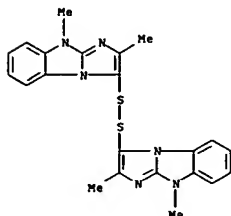
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3943180	A1	19900705	DE 1989-3943180	19891228
JP 02256675	A2	19901017	JP 1989-313880	19891201
US 5008282	A	19910416	US 1989-450264	19891213
GB 2226559	A1	19900704	GB 1989-28872	19891221
GB 2226559	B2	19921014		
FR 2640975	A1	19900629	FR 1989-17334	19891228
US 5240944	A	19930831	US 1991-665662	19910307
PRIORITY APPL. INFO.:			JP 1988-332550	A 19881228
			US 1989-450264	A3 19891213

OTHER SOURCE(S): MARPAT 113:211977
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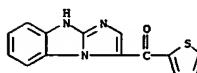


AB ASR [A = imidazoimidazolyl groups Q1-Q3; R = alkenyl, alkynyl, alkanoyl, alkoxyacetyl, (un)substituted alkyl, etc.; R1 = alkyl, (un)substituted phenyl; R2 = alkyl; R3 = H, alkyl; R4, R5 = H; R4R5 = CH=CH=CH] were prepared. Thus, 2-chloro-1,4,5,6,7,8-hexahydrocycloheptimidazole (preparation given) was condensed with 2-picoyl chloride and the product heated 17 h at 80° with ethanolic HCl to give Q1H which was stirred overnight with S2Cl2 to give (Q1S)2. The latter was stirred 5 min with NaBH4 in THF/MeOH after which Q1SCH2CN. Q2SCH2CN (R1 = Me, R3 = H, R6 = 2-pyridyl) gave 83.7% inhibition of histamine-induced gastric acid secretion in rats at 50 mg/kg orally. A granulate and tablet formulation comprising the title compds. are given.

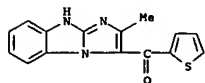
L4 ANSWER 63 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 130477-71-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, in preparation of antiulcer agents)
 RN 130477-71-3 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole, 3,3'-dithiois[2,9-dimethyl- (9CI) (CA INDEX NAME)



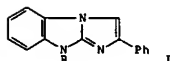
L4 ANSWER 64 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1990:522547 HCAPLUS
 DOCUMENT NUMBER: 113:122547
 TITLE: Inhibition of nonsteady-state dissolution of nickel-zinc alloys
 AUTHOR(S): Ekilik, V. V.; Berezhnaya, A. G.; Fevraleva, V. A.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Zashchita Metallov (1990), 26(3), 367-75
 CODEN: ZAMEA9; ISSN: 0044-1856
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The selective dissoln. of Zn6Ni, Zn50Ni, Zn58Ni, Zn72Ni and Zn96Ni was studied in aqueous LiCl + HCl solns. by electrochem. methods. The selectivity and diffusion coeffs. of Zn and effective thicknesses of the interdiffusion zone and periods of selective dissoln. were estimated. The effect of inhibitors on the dissoln. characteristics was studied.
 IT 128945-76-6D, derivs.
 RL: PRP (Properties)
 (corrosion inhibitor, for nickel-zinc alloys)
 RN 128945-76-6 HCAPLUS
 CN Methanone, 1H-imidazo[1,2-a]benzimidazol-3-yl-2-thienyl- (9CI) (CA INDEX NAME)



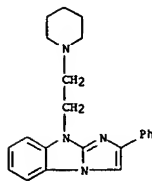
L4 ANSWER 65 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1990:242084 HCAPLUS
 DOCUMENT NUMBER: 112:242084
 TITLE: Influence of surfactants and the composition of a nickel-zinc alloy on its dissolution in perchlorate media
 AUTHOR(S): Ekilik, V. V.; Berezhnaya, A. G.; Fevraleva, V. A.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, USSR
 SOURCE: Elektrokimiya (1990), 26(3), 288-93
 CODEN: ELKXAX; ISSN: 0424-8570
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The selective and uniform dissoln. of Ni-Zn alloys (with Ni contents of 6, 50, 58 and 72 atomic%) was studied in aqueous ClO4- solns. over a wide region of potentials. The coeffs. of selectivity and diffusion of Zn, periods of the selective dissoln. and effective thicknesses of zones of interdiffusion of the alloy components were estimated. The effect of surfactants on the alloy dissoln. was examined.
 IT 127323-72-2D, derivs.
 RL: PRP (Properties)
 (surfactant, anodic dissoln. in passivation of nickel-zinc alloys in relation to)
 RN 127323-72-2 HCAPLUS
 CN Methanone, (2-methyl-1H-imidazo[1,2-a]benzimidazol-3-yl)-2-thienyl- (9CI) (CA INDEX NAME)



L4 ANSWER 66 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1990:210542 HCAPLUS
 DOCUMENT NUMBER: 112:210542
 TITLE: Effects of condensed derivatives of benzimidazole on gastric secretion
 AUTHOR(S): Kovalev, G. V.; Spasov, A. A.; Bakumov, P. A.; Reshetov, M. E.; Anisimova, V. A.; Kuz'menko, T. A.; Stokhin, Yu. V.; Dianov, V. M.
 CORPORATE SOURCE: Volgograd. Med. Inst., Volgograd, USSR
 SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1990), 24(2), 127-30
 CODEN: KHFZAN; ISSN: 0023-1134
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI

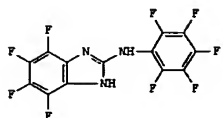


AB The secretion of stomach juice and its content of HCl and pepsin was studied in rats subjected to a 7-h pylorus ligation and treatments with derivs. of benzimidazole and condensed benzimidazoles with a common N atom such as thiazolo[2,3-a]benzimidazoles, triazeno[2,3-a]benzimidazoles, pyrazolo[1,5-a]benzimidazoles, triazolo[1,5-a]benzimidazoles, and imidazo[1,2-a]benzimidazoles. The most marked inhibitory effect on the parietal cells of the stomach was produced by 9-dialkylaminoalkyl-2-phenylimidazo[1,2-a]benzimidazoles (I, R = CH2CH2NEt2, morpholinoethyl, piperidinoethyl). The activity of I was more potent than cimetidine and comparable to omeprazole.
 IT 23572-33-0
 RL: BIOL (Biological study)
 (stomach secretion inhibition by, antiulcer effects and structure in relation to)
 RN 23572-33-0 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole, 2-phenyl-9-[2-(1-piperidinyl)ethyl]- (9CI) (CA INDEX NAME)

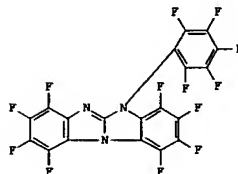


L4 ANSWER 66 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L4 ANSWER 67 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1990:178787 HCAPLUS
 DOCUMENT NUMBER: 112:178787
 TITLE: Reaction of N-pentafluorophenylcarbonimidoyl dichloride with primary amines
 AUTHOR(S): Kolesnikov, I. V.; Petrova, T. D.; Platonov, V. E.; Ryabicheva, T. G.; Mikhailov, V. A.; Popov, A. A.; Savelova, V. A.
 CORPORATE SOURCE: Novosib. Inst. Org. Khim., Novosibirsk, USSR
 SOURCE: Zhurnal Organicheskoi Khimii (1989), 25(8), 1689-95
 CODEN: ZORXAE; ISSN: 0514-7492
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 112:178787
 GI



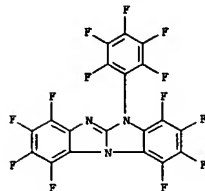
II



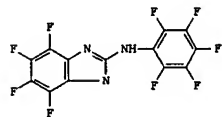
III

AB Treating C6F5N:CCl2 (I) with RNH2 (R = Bu, Me3C, Ph, C6F5) in MeCN gave C6F5N:C:NR and C6F5N:C(NHR)2. Treating I with o-H2NCGH4NH2 gave benzimidazole II. Treating C6F5N:C(NHC6F5)2 with K2CO3 in DMF gave 64% benzimidazobenzimidazole III.
 IT 120672-74-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 120672-74-4 HCAPLUS
 CN 5H-Benzimidazo[1,2-a]benzimidazole, 1,2,3,4,7,8,9,10-octafluoro-5-(pentafluorophenyl)- (9CI) (CA INDEX NAME)

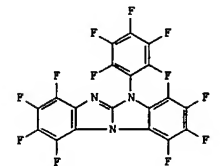
L4 ANSWER 67 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L4 ANSWER 68 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1989:406852 HCAPLUS
 DOCUMENT NUMBER: 111:6852
 TITLE: Reactions of N-polyfluorophenylcarbonimidoyl dichlorides with primary and secondary amines. Kinetics and mechanism. Synthesis of polyfluorinated carbodiimides, chloroformamides, guanidines and benzimidazoles
 AUTHOR(S): Kolesnikov, I. V.; Petrova, T. D.; Platonov, V. E.; Mikhailov, V. A.; Popov, A. A.; Savelova, V. A.
 CORPORATE SOURCE: Inst. Org. Chem., Novosibirsk, 630090, USSR
 SOURCE: Journal of Fluorine Chemistry (1988), 40(2-3), 217-46
 CODEN: JFLCAR; ISSN: 0022-1139
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 111:6852
 GI



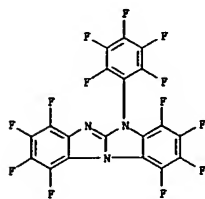
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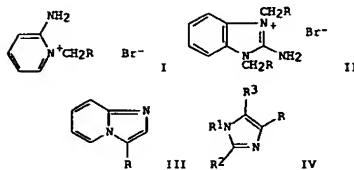
III

AB The reactions of N-(polyfluorophenyl)carbonimidoyl dichlorides, e.g., C6F5N:CCl2 (I), with primary aliphatic amines led to carbodiimides or guanidines, depending on the amount of amine. The carbodiimides reacted with amines to form guanidines. The reactions with primary aromatic amines produced only triarylguanidines. I reacted with tetrafluoro-o-phenylenediamine to give tetrafluorobenzimidazole derivative II. Polyfluorinated benzimidazoles were also produced by the thermolysis of polyfluorinated triarylguanidines. Heating N1,N2,N3-tris(pentafluorophenyl)guanidine with K2CO3 in DMF gave benzimidazo[1,2-a]benzimidazole derivative III. N-(Polyfluorophenyl)carbonimidoyl dichlorides reacted with various secondary amines at room temperature giving N-(polyfluorophenyl)chloroformamides in high yields. Elevated temperature and prolonged reaction time led to N-(polyfluorophenyl)guanidines. The reaction proceed by a bimol. nucleophilic addition-elimination mechanism via a tetrahedral intermediate.
 IT 120672-74-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)

L4 ANSWER 68 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (prepn. of)
 RN 120672-74-4 HCAPLUS
 CN 5H-Benzimidazo[1,2-a]benzimidazole, 1,2,3,4,7,8,9,10-octafluoro-5-(pentafluorophenyl)- (9CI) (CA INDEX NAME)

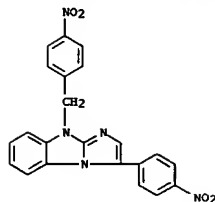


L4 ANSWER 69 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1989:135145 HCAPLUS
 DOCUMENT NUMBER: 110:135145
 TITLE: Synthesis of imidazoles by reaction of N-benzylated amidines with carboxylic acid derivatives
 AUTHOR(S): Liebscher, Juergen; Feist, Kersten
 CORPORATE SOURCE: Sekt. Chem., Humboldt Univ., Berlin, Ger. Dem. Rep.
 SOURCE: Journal fuer Praktische Chemie (Leipzig) (1988), 330(2), 175-81
 CODEN: JPCEAO; ISSN: 0021-8383
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 110:135145
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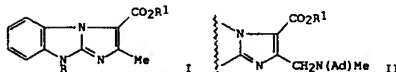


AB 2-Amino-N-heterocycles, such as 2-aminopyridine or 2-aminobenzimidazole deriva I and II (R = 4-O₂NC₆H₄), as well as benzamides R₁N:CR₂NHCH₂R (R₁ = Ph, 4-MeOC₆H₄; R₂ = Ph, 4-ClC₆H₄), all possessing a N-(4-nitrobenzyl)-substituent react as N-C-N-C synthons with formamide chlorides, formamide acetals, Ac₂O with formation of imidazole compds., e.g. III and IV (R₃ = H, Me). In some cases, intermediate N-acetylation or N-formylation products are isolated.
 IT 119690-44-7p
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 119690-44-7 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 3-(4-nitrophenyl)-9-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

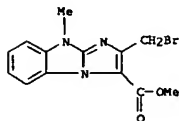
L4 ANSWER 69 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



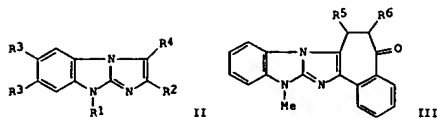
L4 ANSWER 70 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1989:114752 HCAPLUS
 DOCUMENT NUMBER: 110:114752
 TITLE: Synthesis and neuropsychotropic activity of imidazo[1,2-a]benzimidazole adamantyl substituents
 AUTHOR(S): Morozov, I. S.; Anisimova, V. A.; Avdyunina, N. I.; Lukova, O. A.; Pyatin, B. M.; Militareva, N. A.; Bykov, N. P.; Dvalishvili, E. G.; Khramilov, A. A.
 CORPORATE SOURCE: NII Farmakol., Moscow, USSR
 SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1988), 22(7), 815-19
 CODEN: KHFZAN; ISSN: 0023-1134
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 110:114752
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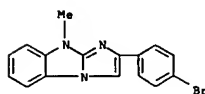
AB Benzimidazolyladamantane derivs. I (R = Me, R₁ = Me, Et; R = Bu, R₁ = Me, Ad = 1-adamantyl) were prepared in 3 steps from benzimidazolium bromides II via cyclization, bromination, and amination by adamantylmethylamine. The hydrochlorides of I inhibited the onset of catalepsy in mice by 88.4, 110.2 and 108.2% at 5 mg/kg dosage.
 IT 119294-91-6p
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and amination by adamantylmethylamine)
 RN 119294-91-6 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-3-carboxylic acid, 2-(bromomethyl)-9-methyl-, methyl ester (9CI) (CA INDEX NAME)



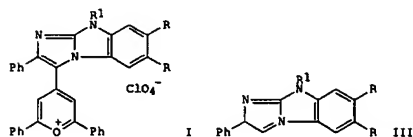
L4 ANSWER 71 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1988:422898 HCAPLUS
 DOCUMENT NUMBER: 109:22898
 TITLE: Imidazo[1,2-a]benzimidazole derivatives. 25.
 Reaction of 2,9-disubstituted imidazo[1,2-a]benzimidazoles with acrylic acids and their derivatives
 AUTHOR(S): Anisimova, V. A.; Korochina, T. B.; Zhurkina, L. I.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, 344090, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1987), (11), 1496-502
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 109:22898
 GI



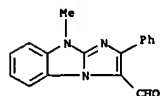
AB CH₂:CHR (I; R = COCl, CO₂H, CO₂Me, cyano, CONH₂) add to benzimidazoles II (R1 = alkyl, CH₂Ph; R2 = Me, aryl, 2-furyl, 2-thienyl; R3 = H, Me; R4 = H) to afford propionic acid derivs. II (same R1-R3; R4 = CH₂CH₂R). Optimized yields are obtained in polyphosphoric acid. The reactivity of I decreases in the order stated. ASCH:CR₆CO₂H (R5 = H, R6 = Me; R5 = Ph, R6 = H) react with II (R1 = Me, R2 = Ph, R3 = R4 = H) to afford the corresponding propionic acids and also tetracyclic compds. III.
 IT 21431-83-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (addition reaction of, with acrylic acid)
 RN 21431-83-4 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole, 2-(4-bromophenyl)-9-methyl- (9CI) (CA INDEX NAME)



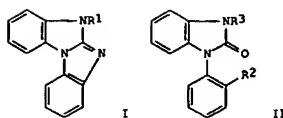
L4 ANSWER 73 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1988:55964 HCAPLUS
 DOCUMENT NUMBER: 108:55964
 TITLE: Reactions of heterocyclic cations with N-containing nucleophiles. 17. Synthesis of pyrylium salts containing tricyclic azole substituents
 AUTHOR(S): Zhdanov, Yu. A.; Zvezdina, E. A.; Statsenko, S. M.; Anisimova, V. A.; Maksimova, A. N.; Korsun, V. V.
 CORPORATE SOURCE: Inst. Fiz. Org. Khim., Rostov, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1987), (3), 309-13
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 108:55964
 GI



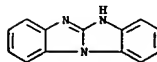
AB Intensely colored 4-azolylpyridinium perchlorates, e.g., I (R = H, R1 = Me, Me₂CH; R = Me, Et) were prepared by heterylation of 2,6-diphenylpyrrolo[1,2-a]benzimidazoles (II) with imidazo- and pyrrolo[1,2-a]benzimidazoles. Thus, refluxing II with condensed benzimidazole III (R = Me, R1 = Et) in DMF 40 min gave 96% I.
 IT 28992-76-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation of, with acetophenone)
 RN 28992-76-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-3-carboxaldehyde, 9-methyl-2-phenyl- (8CI, 9CI) (CA INDEX NAME)



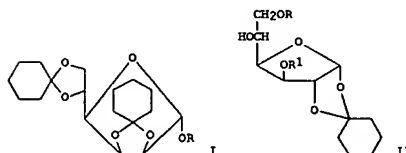
L4 ANSWER 72 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1988:131678 HCAPLUS
 DOCUMENT NUMBER: 108:131678
 TITLE: Synthesis of benzimidazo[1,2-a]benzimidazoles from 1,5-benzodiazepine-2-ones
 AUTHOR(S): Achour, Reddouane; Zniher, Rachid
 CORPORATE SOURCE: Dep. Chim., Fac. Sci., Rabat, Morocco
 SOURCE: Bulletin des Societes Chimiques Belges (1987), 96(10), 787-92
 CODEN: BSCBAG; ISSN: 0037-9646
 DOCUMENT TYPE: Journal
 LANGUAGE: French
 OTHER SOURCE(S): CASREACT 108:131678
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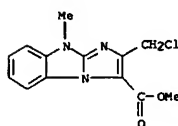
AB Benzimidazobenzimidazoles I (R1 = H, CHMe₂) were prepared from benzimidazolinone derivative II (R2 = NO₂, R3 = CHMe₂) (III). III was hydrogenated to II (R2 = NH₂, R3 = CHMe₂), and the latter was heated to give I (R1 = CHMe₂). I (R1 = H) was prepared from III via II (R2 = NH₂, R3 = H); the latter was obtained from III and SnCl₂-HCl.
 IT 28890-99-5P
 RL: SPN (Synthetic preparation); PREF (Preparation)
 (preparation of)
 RN 28890-99-5 HCAPLUS
 CN 5H-Benzimidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



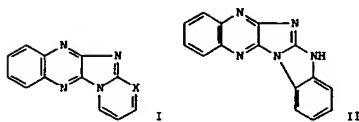
L4 ANSWER 74 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1987:590752 HCAPLUS
 DOCUMENT NUMBER: 107:190752
 TITLE: O-Heterocycle-substituted carbohydrates and their neurotropic activity
 AUTHOR(S): Karkishchenko, N. N.; Alekseeva, V. G.; Anisimova, V. A.; Korol, E. L.; Vilkov, G. A.; Barchan, I. A.; Buchnaya, T. A.; Alekseev, Yu. E.; Zhdanov, Yu. A.
 CORPORATE SOURCE: Inst. Fiz. Org. Khim., Rostov, USSR
 SOURCE: Khimiko-Farmatsevticheski Zhurnal (1987), 21(4), 408-13
 CODEN: KHFZAN; ISSN: 0023-1134
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



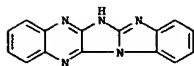
AB O-Heterocycle-substituted monosaccharides (e.g., I, R = substituted pyridinyl, quinolinyl or imidazo[1,2-a]benzimidazolyl) were prepared by the alkylation of OH groups in monosaccharides with chloromethyl heterocyclic derivs. under phase-transfer catalysis conditions (tributylbenzylammonium chloride). I (R = 2-quinolinylmethyl) and II (R = 2-pyridinylmethyl, R1 = Me) showed neurotropic activity close to that of aminazine. Other compds. showed lower activity and the remaining did not show activity.
 IT 110989-99-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with cyclohexylidene glucofuranose derivs.)
 RN 110989-99-6 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-3-carboxylic acid, 2-(chloromethyl)-9-methyl-, methyl ester (9CI) (CA INDEX NAME)



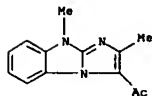
L4 ANSWER 75 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1987:477755 HCAPLUS
 DOCUMENT NUMBER: 107:77755
 TITLE: A one-step synthesis of heterocyclic imidazo[4,5-b]quinoxalines
 AUTHOR(S): Tagdivala, P. V.; Rangnekar, D. W.
 CORPORATE SOURCE: Dep. Chem. Technol., Univ. Bombay, Bombay, 400 019, India
 SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1986), 25B(10), 1057-8
 CODEN: IJSBDB; ISSN: 0376-4699
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 107:77755
 GI



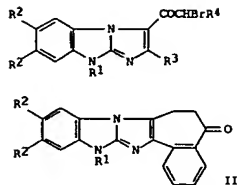
AB Synthesis of the title imidazoquinoxalines I (X = CH, N) and II has been achieved by the fusion of 2-aminopyridine, 2-aminopyrimidine, and 2-aminobenzimidazole with 2,3-dichloroquinoxaline in the presence of AcONa. The fluorescent properties of these compds. have been studied.
 IT 81106-70-9P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and fluorescence spectrum of)
 RN 81106-70-9 HCAPLUS
 CN 5H-Benzimidazo[1',2':1,2]imidazo[4,5-b]quinoxaline (9CI) (CA INDEX NAME)



L4 ANSWER 76 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

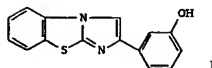


L4 ANSWER 76 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1987:156344 HCAPLUS
 DOCUMENT NUMBER: 106:156344
 TITLE: Studies on imidazo[1,2-a]benzimidazole derivatives. 21. Synthesis of halo ketones of imidazo[1,2-a]benzimidazole series
 AUTHOR(S): Anisimova, V. A.; Korochina, T. B.; Avdyunina, N. I.; Simonov, A. M.
 CORPORATE SOURCE: Nauchno-Issled. Inst. Fiz. Org. Khim., Rostov. Gos. Univ., Rostov-on-Don, 344090, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1986), (3), 339-45
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 106:156344
 GI

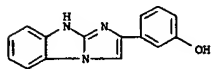


AB α -Bromo ketones I (R1 = Me, PhCH2, Et, Bu; R2 = H, Me; R3 = Ph, Me; R4 = H, Me) were prepared either by bromination of 3-acylimidazo[1,2-a]benzimidazole by Br-AcOH, or by acylation of imidazo[1,2-a]benzimidazoles, unsubstituted in the 3 position, with α -bromoalkanoyl halides. Treating 2-phenylimidazo[1,2-a]benzimidazoles with BrCH2CH2CO2H in polyphosphoric acid gave derivs. of benzocyclohepten[5',6':4,5]imidazo[1,2-a]benzimidazole II (R1 = Me, Et, Pr, Bu; R2 = H; R1 = Et, R2 = Me).
 IT 40783-90-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and bromination of)
 RN 40783-90-2 HCAPLUS
 CN Ethanone, 1-(2,9-dimethyl-9H-imidazo[1,2-a]benzimidazol-3-yl)- (9CI) (CA INDEX NAME)

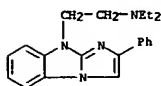
L4 ANSWER 77 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1986:109547 HCAPLUS
 DOCUMENT NUMBER: 104:109547
 TITLE: Imidazo[2,1-b]benzothiazoles. 2. New immunosuppressive agents
 AUTHOR(S): Mase, Toshiyasu; Arima, Hideki; Tomioka, Kenichi; Yamada, Toshimitsu; Murase, Kiyoshi
 CORPORATE SOURCE: Cent. Res. Lab., Yamanouchi Pharm. Co. Ltd., Tokyo, 174, Japan
 SOURCE: Journal of Medicinal Chemistry (1986), 29(3), 386-94
 CODEN: JMCMAR; ISSN: 0022-2623
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 104:109547
 GI



AB 2-Phenylimidazo[2,1-b]benzothiazole derivs. and analogs were prepared and tested for immunol. activity. Some of the compds. showed significant suppressive activity of delayed type hypersensitivity without inhibition of humoral immunity in mice by oral administration. The most active compound was the hydroxyphenyl derivative I.
 IT 99583-00-3P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and immunosuppressant activity of)
 RN 99583-00-3 HCAPLUS
 CN Phenol, 3-(1H-imidazo[1,2-a]benzimidazol-2-yl)- (9CI) (CA INDEX NAME)

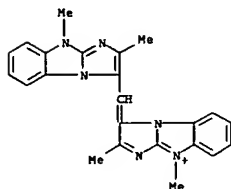


L4 ANSWER 78 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1985:541887 HCAPLUS
 DOCUMENT NUMBER: 103:141887
 TITLE: Studies of imidazo[1,2-a]benzimidazole derivatives. XX. Synthesis and pharmacological activity of α,β -unsaturated ketones of imidazo[1,2-a]benzimidazole
 AUTHOR(S): Zhdanov, Yu. A.; Kovalov, G. V.; Anisimova, V. A.; Spasov, A. A.; Avdyunina, M. I.; Alekseeva, V. G.; Korol, E. L.; Barchan, I. A.; Ionov, I. D.; Shaidrov, V. V.
 CORPORATE SOURCE: Inst. Fiz. Org. Khim., Rostov, USSR
 SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1985), 19(4), 412-19
 CODEN: KHFZAN; ISSN: 0023-1134
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 103:141887
 G1 For diagram(s), see printed CA Issue.
 AB Imidazobenzimidazole ketones I (R = furyl, 5-bromofuryl, 4-Me₂NC₆H₄; R1 = Ph, Me, 4-BrC₆H₄; NR22 = Et₂N, piperidino) were prepared by base catalyzed condensation of RCHO with acetyl imidazobenzimidazoles. Ketones II (R3 = Me, Bu; R4 = 5-nitrofuryl, 5-nitrothienyl, Q, Q1 (R5 = Me, R6R7 = pentamethylene; R5 = H; R6 = R7 = Me)) were obtained by Wittig condensations of R4 CHO and carbohydrate aldehydes. Some I possess hypotensive and spasmolytic activity, but their antiinflammatory activities were less than that of amidopyrone. II possess bactericidal activity at high concentration
 IT 23572-32-9
 RL: RCT (Reactant): RACT (Reactant or reagent) (acetylation of)
 RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



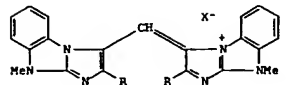
● 2 HCl

L4 ANSWER 79 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



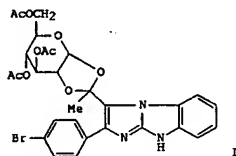
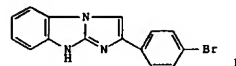
● 1-

L4 ANSWER 79 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1984:572988 HCAPLUS
 DOCUMENT NUMBER: 101:172988
 TITLE: Acid-base properties of cyanine dyes from imidazo[1,2-a]benzimidazole
 AUTHOR(S): Pakhomov, A. S.; Anisimova, V. A.; Bagdasarov, K. N.; Chernov'yants, M. S.
 CORPORATE SOURCE: M. A. Suslov Rostov State Univ., Rostov, USSR
 SOURCE: Zhurnal Analiticheskoi Khimii (1984), 39(6), 1040-3
 CODEN: ZAKHAB; ISSN: 0044-4502
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



AB Cyanines I (R = Me, Ph, C₆H₄NO₂-4; X = I, OAc) were prepared and their protonation equilibrium studied on the H⁺ acidity scale. The pK_a values were -1.59, -1.54, and -2.39 for R = Me, Ph, and C₆H₄NO₂-4, resp. The pK values for hydrolysis, which limits their usefulness on the basic side, were 8.48, 9.60, and 9.51, resp. Thus, the dyes are useful as anal. reagents over a wide pH range.
 IT 92570-03-1
 RL: FRP (Properties) (absorption spectra and protonation equilibrium of)
 RN 92570-03-1 HCAPLUS
 CN 3H-Imidazo[1,2-a]benzimidazolium, 3-[(2,9-dimethyl-9H-imidazo[1,2-a]benzimidazol-3-yl)methylene]-2,9-dimethyl-, iodide (9CI) (CA INDEX NAME)

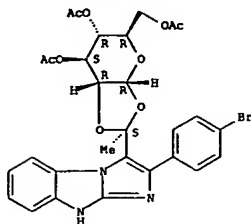
L4 ANSWER 80 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1984:103759 HCAPLUS
 DOCUMENT NUMBER: 100:103759
 TITLE: Molecular structure of 3,4,6-tri-O-acetyl-1,2-O-[(1S)-1-[2-(p-bromophenyl)-9H-imidazo[1,2-a]benzimidazol-3-yl]ethylidene]- α -D-glucopyranose acetone solvate
 AUTHOR(S): Takayanagi, Hiroaki; Ogura, Haruo; Tsuzuno, Nobuyasu; Kubota, Isao; Iitaka, Yoichi
 CORPORATE SOURCE: Sch. Pharm. Sci., Kitasato Univ., Tokyo, 108, Japan
 SOURCE: Bulletin of the Chemical Society of Japan (1983), 56(11), 3537-8
 CODEN: BCSJAB; ISSN: 0009-2673
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB The structure of a product from a reaction mixture of imidazobenzimidazole I and 2,3,4,6-tetra-O-acetyl- β -D-glucopyranosyl bromide in the presence of NaI, hexamethyldisilazane, and (NH₄)₂SO₄ has been established as II (title compound) by x-ray anal.
 IT 88990-63-0
 RL: FRP (Properties) (crystal and mol. structure of)
 RN 88990-63-0 HCAPLUS
 CN α -D-Glucopyranose, 1,2-O-[1-[2-(4-bromophenyl)-1H-imidazo[1,2-a]benzimidazol-3-yl]ethylidene]-, 3,4,6-triacetate, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 80 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L4 ANSWER 81 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1984:35296 HCAPLUS
 DOCUMENT NUMBER: 100:35296
 TITLE: Polyurethane resin compositions for casting
 PATENT ASSIGNEE(S): Janome Sewing Machine Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKOJAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

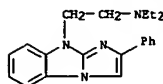
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58087150	A2	19830524	JP 1981-185172	19811120
JP 02050951	B4	19901105		

PRIORITY APPLN. INFO.: JP 1981-185172 19811120

AB Polyurethane moldings for substitution of ABS polymer moldings contain 3-45% mixts. of scaly mica having weight average aspect ratio >10 and size 100-400 mesh and glass beads having size 50-200 mesh in ratio 1:0.02-1. Thus, test pieces prepared from Ru-13 [89386-21-4] (polyurethane) 100, phlogopite 30, and glass beads 5 parts had tensile strength 399 kg/cm², flexural strength 520 kg/cm², Shore A hardness 99, deformation 0.20 mm at 50° and load 50 g, and thermal expansion coefficient (mm/C + 10-5) 6.4, compared with 194, 294, 95, 2.8, and 16.1, resp., for a test pieces containing no fillers.

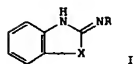
IT 23572-32-9
 RL: USES (Uses)
 (fillers for, phlogopite and glass beads as)

RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

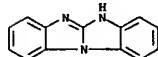
L4 ANSWER 82 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1983:521637 HCAPLUS
 DOCUMENT NUMBER: 99:121637
 TITLE: Pyrolyses of 2-aminobenzazoles
 AUTHOR(S): Martineau, Andre; DeJongh, Don C.
 CORPORATE SOURCE: Dep. Chem., Univ. Montreal, Montreal, QC, H3C 3V1, Can.
 SOURCE: Journal of Analytical and Applied Pyrolysis (1983), 5(1), 39-68
 CODEN: JAAPDD; ISSN: 0165-2370
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 99:121637
 GI



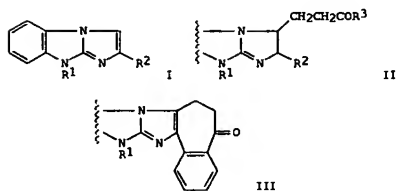
AB The pyrolysis and mass spectral fragmentation of I (R = Ph, H; X = O, NH, S) follow similar paths and mechanisms. The replacement of H in I (R = H) by Ph allowed the observation of reaction intermediates, in both the pyrolysis and the mass spectra, which were too unstable for direct observation with I (R = H); the Ph group behaved as an internal trapping group. The M⁺ and (M - H)⁺ peaks are the most intense mass spectral peaks for I.

IT 28890-99-5P
 RL: FRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and mass spectrum of)

RN 28890-99-5 HCAPLUS
 CN 5H-Benzimidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



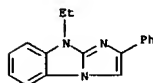
L4 ANSWER 83 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1983:422377 HCAPLUS
 DOCUMENT NUMBER: 99:22377
 TITLE: Synthesis of 3-(imidazo[1,2-a]benzimidazol-3-yl)propionic acids and their derivatives
 AUTHOR(S): Anisimova, V. A.; Zhurkina, L. I.; Chub, N. K.
 CORPORATE SOURCE: Nauchno-Issled. Inst. Fiz. Org. Khim., Rostov, 344006, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1983), (2), 271-2
 CODEN: KGSSAQ; ISSN: 0453-0234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



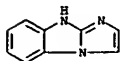
AB Addition of CH₂:CHR (R = CO₂H, CO₂Me, CN) to imidazobenzimidazoles I (R₁ = Me, Et, R₂ = Ph; R₁ = R₂ = Me) at 70-90° gave 80-100% II (R₃ = OH, OMe, NH₂). Addition of CH₂:CHCO₂H to I (R₂ = Ph) at 110-120° gave 95-97% III.

IT 2208-82-4
 RL: RCT (Reactant); RACT (Reactant or reagent) (addition reaction of, with acrylic acid or acrylonitrile)

RN 2208-82-4 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 9-ethyl-2-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



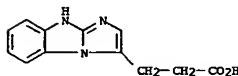
L4 ANSWER 84 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1983:125914 HCAPLUS
 DOCUMENT NUMBER: 98:125914
 TITLE: Research on the chemistry of heterocycles at Rostov State University. (Review)
 AUTHOR(S): Simonov, A. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, 344090, USSR
 SOURCE: Khimiya Geterotsiklichesikh Soedinenii (1982), (12), 1589-604
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal: General Review
 LANGUAGE: Russian
 AB A review of research on benzimidazoles imidazolo[1,2-a]benzimidazoles, indazoles, and 2-diazo- and 2-azobenzimidazoles during 1957-1982 with 86 refs.
 IT 247-79-00, derivs.
 RL: MSC (Miscellaneous)
 (chemical of)
 RN 247-79-0 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 85 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1983:107288 HCAPLUS
 DOCUMENT NUMBER: 98:107288
 TITLE: 3-(Imidazo[1,2-a]benzimidazol-3-yl) and 3-(Imidazo[1,2-a]pyridin-3-yl)propionic acid or their derivatives
 INVENTOR(S): Anisimova, V. A.; Zhurkina, L. I.; Chub, N. K.
 PATENT ASSIGNEE(S): Rostov State University, USSR
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obratzy, Tovarnye Znaki 1982, (30), 295-6.
 CODEN: UROKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

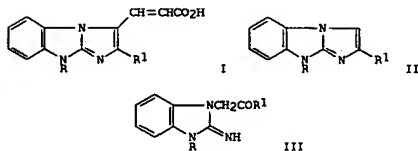
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 904295	A1	19820815	SU 1980-2909134	19800410
PRIORITY APPLN. INFO.:			SU 1980-2909134	19800410

OTHER SOURCE(S): CASREACT 98:107288
 GI For diagram(s), see printed CA Issue.
 AB Title compds. I (X = CH:CHCH:CH or Q; R = alkyl; R1 = alkyl, aryl; R2 = H, alkyl; R3 = OH, alkoxy, amino) were prepared by treating II or III or their mineral acid salts with CH2:CR2Y [Y = alkoxy, carbonyl, CO2H, cyano] in polyphosphoric acid at 80-130°. The reaction with CH2:CR2CO2H were carried out at 80-90°.
 IT 84797-39-7DP, derivative
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 84797-39-7 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole-3-propanoic acid (9CI) (CA INDEX NAME)

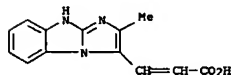


L4 ANSWER 86 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1983:89357 HCAPLUS
 DOCUMENT NUMBER: 98:89357
 TITLE: 3-(Imidazo[1,2-a]benzimidazol-3-yl)acrylic acids
 INVENTOR(S): Anisimova, V. A.; Zhurkina, L. I.; Simonov, A. M.
 PATENT ASSIGNEE(S): Rostov State University, USSR
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obratzy, Tovarnye Znaki 1982, (30), 295.
 CODEN: UROKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 904295	A1	19820815	SU 1980-2908582	19800410
PRIORITY APPLN. INFO.:			SU 1980-2908582	19800410



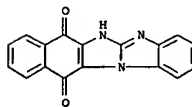
AB The title compds. I (R = alkyl, R1 = Me, Ph, p-BrC6H4) were prepared by treating II or III with propionic acid at 65-75° in polyphosphoric acid.
 IT 84705-02-2DP, alkyl derivs.
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 84705-02-2 HCAPLUS
 CN 2-Propenoic acid, 3-(2-methyl-1H-imidazo[1,2-a]benzimidazol-3-yl)- (9CI) (CA INDEX NAME)



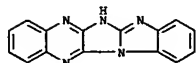
L4 ANSWER 87 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1982:162654 HCAPLUS
 DOCUMENT NUMBER: 96:162654
 TITLE: A convenient synthesis of polyfused heterocyclic systems from heterocyclic amines and 2,3-dichloronaphthoquinone using phase transfer catalysis
 AUTHOR(S): El-Shafel, Ahmed Kamal; Sultan, Adel; Vernin, Gaston
 CORPORATE SOURCE: Chem. Dep., Fac. Sci., Sohag, Egypt
 SOURCE: Heterocycles (1982), 19(2), 333-8
 CODEN: HETCYM; ISSN: 0385-5414
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

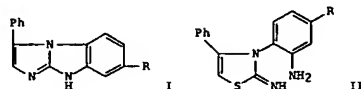
AB Heterocycles I (R = H, Me, Et, Ph), II, III (R1 = Me, Pr), and IV-IX were prepared by cyclization of 2,3-dichloronaphthoquinone with the appropriate heterocyclic amine in benzene, 50% aqueous NaOH, Bu4N+Br- (as phase-transfer catalyst), 4-6 h at 60°.
 IT 81411-86-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 81411-86-1 HCAPLUS
 CN 5H-Naphth[2',3':4,5]imidazo[1,2-a]benzimidazole-7,12-dione (9CI) (CA INDEX NAME)



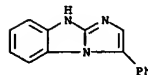
L4 ANSWER 88 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1982:122753 HCAPLUS
 DOCUMENT NUMBER: 96:122753
 TITLE: Synthesis of some new heterocyclic systems containing a bridgehead nitrogen atom. Reaction of 2,3-dichloroquinoxaline with N-heteroaromatic amines
 AUTHOR(S): El-Shafei, Ahmed Kamal; El-Kashaf, Hussein Salama; Ahmed, Abdel-Badih; Ghattas, G.
 CORPORATE SOURCE: Chem. Dep., Fac. Sci., Sohag, Egypt
 SOURCE: Gazzetta Chimica Italiana (1981), 111(9-10), 409-12
 CODEN: GCITA9; ISSN: 0016-5603
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB 2,3-Dichloroquinoxaline has been cyclocondensed with MeCSNH₂, 2-aminopyridine, 2-aminothiazoles, 2-aminothiadiazoles, 2-aminobenzimidazole and 2-mercaptobenzimidazole to give the corresponding heterocyclic systems. The chloroquinoxalimylamines were also obtained in some cases.
 IT 81106-70-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 81106-70-9 HCAPLUS
 CN 5H-Benzimidazo[1',2':1,2]imidazo[4,5-b]quinoxaline (9CI) (CA INDEX NAME)



L4 ANSWER 89 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1981:587155 HCAPLUS
 DOCUMENT NUMBER: 95:187155
 TITLE: Studies of heterocyclics: synthesis of 7-substituted 3-phenyl-1H-imidazo[1,2-a]benzimidazoles
 AUTHOR(S): Soni, R. P.
 CORPORATE SOURCE: Dep. Chem., Univ. Jodhpur, Jodhpur, India
 SOURCE: Australian Journal of Chemistry (1981), 34(7), 1557-9
 CODEN: AJCHAS; ISSN: 0004-9425
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 95:187155
 GI

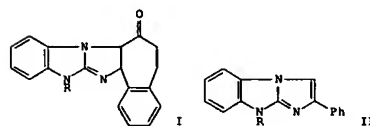


AB Imidazo[1,2-a]benzimidazoles I (R = H, Me, EtO, Br, HO) were prepared by thermal rearrangement of iminothiazoline II with loss of H₂S.
 IT 75542-79-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 75542-79-9 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole, 3-phenyl- (9CI) (CA INDEX NAME)

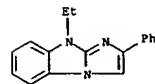


L4 ANSWER 90 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1981:569188 HCAPLUS
 DOCUMENT NUMBER: 95:169188
 TITLE: Derivatives of Benzocyclohepta[5',6':4,5]imidazo[1,2-a]benzimidazole
 INVENTOR(S): Anisimova, V. A.; Avdyunina, N. I.; Simonov, A. M.
 PATENT ASSIGNEE(S): Rostov State University, USSR
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1981, (27), 278-9.
 CODEN: URXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

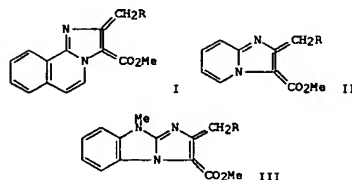
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 753094	A1	19810723	SU 1979-2739676	19790322
PRIORITY APPLN. INFO.:			SU 1979-2739676	A 19790322
OTHER SOURCE(S):	CASREACT	95:169188		
GI				



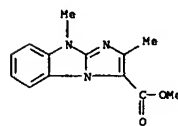
AB Title compds. I (R = Me, Et, Pr, Bu) were prepared by cyclocondensation reaction of phenylimidazobenzimidazoles II with BrCH₂CH₂CO₂H in polyphosphoric acid at 90-105°.
 IT 2208-82-4
 RL: RCT (Reactant); RACT (Reactant or reagent) (cyclocondensation of, with bromopropionate)
 RN 2208-82-4 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 9-ethyl-2-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



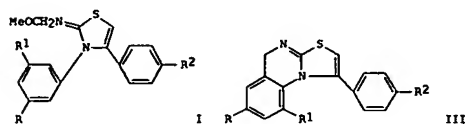
L4 ANSWER 91 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1981:121408 HCAPLUS
 DOCUMENT NUMBER: 94:121408
 TITLE: 1-Chlorobenzotriazole as a hetarylating agent
 AUTHOR(S): Kuz'menko, V. V.; Kuz'menko, T. A.; Simonov, A. M.
 CORPORATE SOURCE: Rostov, Gos. Univ., Rostov, USSR
 SOURCE: Khimiya Geterotsiklichesikh Soedinenii (1980), (10), 1424-5
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



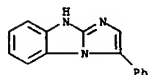
AB Treatment of imidazoles I, II and III (R = H) with 1-chlorobenzotriazole gave 23-57% I, II and III (R = 1-benzotriazolyl).
 IT 40783-82-2
 RL: RCT (Reactant); RACT (Reactant or reagent) (hetarylation of, with chlorobenzotriazole)
 RN 40783-82-2 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-3-carboxylic acid, 2,9-dimethyl-, methyl ester (9CI) (CA INDEX NAME)



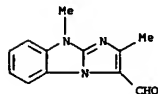
L4 ANSWER 92 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1980:620688 HCAPLUS
 DOCUMENT NUMBER: 93:220688
 TITLE: Studies in heterocyclics. Part IX. Synthesis of thiazolo[3,2-a]quinazolines and imidazo[1,2-a]benzimidazoles
 AUTHOR(S): Sondhi, S. M.; Mahajan, M. P.; Ralhan, N. K.
 CORPORATE SOURCE: Dep. Chem., Punjabi Univ., Patiala, 147002, India
 SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1979), 17B(6), 632-5
 CODEN: IJSBDB; ISSN: 0376-4699
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 93:220688
 GI



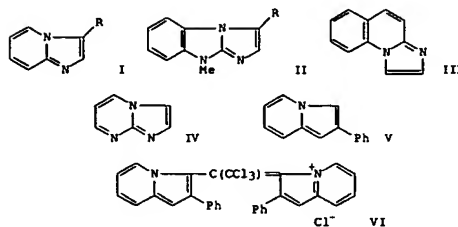
AB 2-N-Methoxymethylimino-3,4-diphenyl-4-thiazolines I (R, R1 = H, Me, OMe; R2 = H, Br, Me, OMe, OEt), obtained from 2-imino-3,4-diphenyl-4-thiazolines (II) and CH2O in MeOH undergo cyclization to 9H-thiazolo[3,2-a]quinazolines III, which have also been obtained in a single step from II and paraformaldehyde. 3-(o-Aminoaryl)-2-imino-4-phenyl-4-thiazolines and 2-imino-3,4-diaryl-4-thiazolines undergo thermal rearrangements to 3-phenyl-9H-imidazo[1,2-a]benzimidazoles and N-nitriles NCHN3C(:CHSH)CGH4R4-4 (R3 = Ph, 4-MeCGH4, 4-MeOCGH4, 2-naphthyl, 1-naphthyl; R4 = H, Me, Br), resp.
 IT 75542-79-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 75542-79-9 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole, 3-phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 93 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

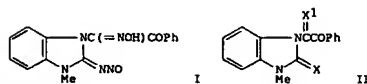


L4 ANSWER 93 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1980:549290 HCAPLUS
 DOCUMENT NUMBER: 93:149290
 TITLE: Chloral as a formylation agent for some bridging hetero systems
 AUTHOR(S): Anisimova, V. A.; Avdyunina, N. I.; Pozharskii, A. F.; Simonov, A. M.; Talanova, L. N.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1980), (4), 528-37
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 93:149290
 GI

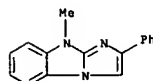


AB Heterocycles having a sufficient local π excess, e.g., I (R = H) and II (R = H), reacted with chloral to give an alc. [I and II, R = CH(OH)CCl3] and an aldehyde (I and II, R = CHO). No reaction occurred if the local π excesses were too small, e.g., in III, or if the total π charge was pos., e.g., in IV. When large local and total π excesses were present, e.g., in V, 2 mols. of the heterocycle reacted to give a cyanine dye such as VI.
 IT 28992-72-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 28992-72-5 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-3-carboxaldehyde, 2,9-dimethyl- (8CI, 9CI) (CA INDEX NAME)

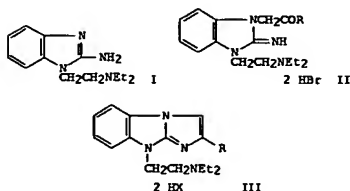
L4 ANSWER 94 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1980:446516 HCAPLUS
 DOCUMENT NUMBER: 93:46516
 TITLE: Studies on imidazo[1,2-a]benzimidazole derivatives. 19. Effect of excess nitrous acid on 9-methyl-2-phenylimidazo[1,2-a]benzimidazole
 AUTHOR(S): Anisimova, V. A.; Simonov, A. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1980), (1), 68-70
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 93:46516
 GI



AB The title reaction gave 93% nitrosoiminobenzimidazoline I. Heating I in 10% NaOH at 20° gave ketone II (X = O, X1 = NOH) but in 10% HCl imine II (X = NH, X1 = O) was formed. II (X = NH, X1 = O) was hydrolyzed to give II (X = X1 = O), which was also obtained by heating II (X = NH, X1 = O).
 IT 21431-82-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with excess nitrous acid)
 RN 21431-82-3 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 9-methyl-2-phenyl- (8CI, 9CI) (CA INDEX NAME)

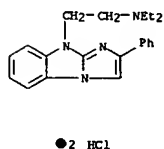


L4 ANSWER 95 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1979:611327 HCAPLUS
 DOCUMENT NUMBER: 91:211327
 TITLE: Synthesis and pharmacological properties of some
 disubstituted imidazo[1,2-a]benzimidazole derivatives
 Koval'ev, G. V.; Anisimova, V. A.; Simonov, A. M.;
 Gofman, S. M.; Petrov, V. I.; Tyurenkov, I. N.; Fomin,
 Yu. K.
 CORPORATE SOURCE: Nauchno-Issled. Inst. Fiz. Org. Khim., Rostov-on-Don,
 USSR
 SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1979), 13(8),
 57-62
 CODEN: KHfZAN; ISSN: 0023-1134
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 91:211327
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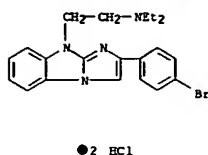


AB Treatment of aminobenzimidazole I with BrCH₂COR (R = p-BrC₆H₄, 1-naphthyl, Me₃C, p-MeOC₆H₄) gave 85-90% imine II, which were cyclized to give 90-78 imidazobenzimidazoles III (R = Cl). III (R = Ph, X = Br, NO₂, 1/2 SO₄) were prepared similarly. III, and 1-methyl-2-phenyl- (IV) and 1-methyl-2-phenyl-2,3-dihydroimidazo[1,2-a]benzimidazole (V) were tested for their hypotensive, adrenergic blocking, antispasmodic, muscle relaxant, antihistaminic and antiproliferative activity; their effect on the heart and central nervous system was also investigated. III showed adrenergic blocking activity. IV and V had weak hypotensive activity but did not have a depressive effect on the central and peripheral receptors. The tested compds. did not have antispasmodic activity, muscle relaxant activity, analgesic or antihistaminic activity.
 IT 38652-51-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and pharmacol. of)
 RN 38652-51-6 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-ethanamine, 2-(4-bromophenyl)-N,N-diethyl-, dihydrochloride (9CI) (CA INDEX NAME)

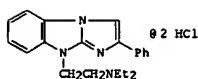
L4 ANSWER 96 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1979:551285 HCAPLUS
 DOCUMENT NUMBER: 91:151285
 TITLE: Comparative study of the hypotensive, sedative, and
 antiinflammatory activity of some imidazole,
 benzimidazole and imidazobenzimidazole derivatives
 Gofman, S. M.; Ermilova, E. S.
 CORPORATE SOURCE: USSR
 SOURCE: Trudy Volgogradskogo Gosudarstvennogo Meditsinskogo
 Instituta (1977), 30(3), 180-5
 CODEN: TVLM88; ISSN: 0376-141X
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB Among 8 imidazobenzimidazoles tested, RU-63 [71503-75-8], RU-64
 [71503-76-9], RU-67 [71503-78-1], RU-13 [23572-32-9], and
 RU-65 [71503-77-0] had high hypotensive activity. Lowering by 225%
 the arterial pressure of mice receiving them at 10 mg/kg, i.p. RU-67 had
 a therapeutic index (i.e. ED₅₀/LD₅₀) of 94, the highest value in the
 group. The 2 imidazole and 3 benzimidazole compds. tested had less
 hypotensive effect. All the compds. potentiated hexenal narcosis to a
 degree which correlated with their hypotensive effect. All the compds.
 were antiinflammatory. The most effective were the imidazobenzimidazoles
 RU-68 [71503-79-2], RU-69 [71503-80-5], and RU-50 [71503-74-7], the
 imidazoles RU-43 [71503-72-5] and RU-44 [71503-73-6], and the
 benzimidazole RU-28 [71503-70-3]. These compds. were more effective than
 dibazole and were at least equal to aminopyrine.
 IT 23572-32-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)
 (pharmacol. of)
 RN 23572-32-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-,
 dihydrochloride (9CI) (CA INDEX NAME)



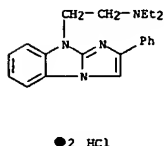
L4 ANSWER 95 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



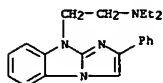
L4 ANSWER 97 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1979:551284 HCAPLUS
 DOCUMENT NUMBER: 91:151284
 TITLE: Antihypertensive activity of new derivatives of
 imidazobenzimidazole
 Pan'shina, M. V.; Vakulina, T. A.; Fomin, Yu. K.
 CORPORATE SOURCE: USSR
 SOURCE: Trudy Volgogradskogo Gosudarstvennogo Meditsinskogo
 Instituta (1977), 30(3), 164-72
 CODEN: TVLM88; ISSN: 0376-141X
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



AB RU-13 (I) [23572-32-9] at 1/15 LD₅₀ normalized blood pressure
 in dogs with exptl. hypertonia and decreased abnormalities in their EKG.
 RU-32 [67015-51-4] and RU-67 [71503-78-1] decreased blood pressure in
 rabbits with exptl. hypertonia. All 3 compds. were more effective than
 dibazole in the extent and duration of action. The compds. were effective
 when given i.m. or orally; i.v. was not recommended because of rapid blood
 pressure drop.
 IT 23572-32-9
 RL: BIOL (Biological study)
 (blood pressure response to)
 RN 23572-32-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-,
 dihydrochloride (9CI) (CA INDEX NAME)

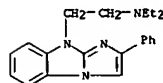


L4 ANSWER 98 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1979:534084 HCAPLUS
 DOCUMENT NUMBER: 91:134084
 TITLE: Biochemical mechanisms of the cardiotropic and vasotropic effect of vascular drugs
 AUTHOR(S): Spasov, A. A.
 CORPORATE SOURCE: USSR
 SOURCE: Trudy Volgogradskogo Gosudarstvennogo Meditsinskogo Instituta (1977), 30(3), 90-104
 CODEN: TVLMB8; ISSN: 0376-141X
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The effects of dibazole [621-72-7] and its imidazole analog RU-13 [23572-32-9], apressin [86-54-4], No-Spa [985-12-6], and ethiron [1071-37-0] on the functional-biochem. characteristics of the heart and on the biochem. mechanisms regulating vascular tone were studied in rats, cats, and dogs. In isolated cat atria, ethiron and apressin, which have pos. inotropic activity, stimulated carbohydrate metabolism, increased the concentration of pyruvic acid, and decreased the concentration of lactate, associated with an increase in malate dehydrogenase and cytochrome oxidase activities. Dibazole and RU-13, which have neg. inotropic effects, decreased glycolysis and carbohydrate metabolism. They decreased the concentration of lactate and inhibited malate dehydrogenase, lactate dehydrogenase, and cytochrome c oxidase activities. The compds. having neg. chronotropic activity, dibazole, RU-13, No-Spa, and apressin, decreased the activity of glucose-6-phosphate dehydrogenase. Ethiron, which has pos. chronotropic activity, increased this pentose phosphate pathway enzyme. The hypotensive compds., dibazole, RU-13, No-Spa, and apressin, interfered with carbohydrate metabolism in the aorta, whereas the hypertensive preparation, ethiron, increased ATPase activity but had no effect on carbohydrate metabolism.
 IT 23572-32-9
 RL: BIOL (Biological study)
 (carbohydrate and energy metabolism by artery and heart response to, cardiotropic and vasotropic effects in relation to)
 RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



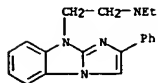
●2 HCl

L4 ANSWER 100 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1979:517411 HCAPLUS
 DOCUMENT NUMBER: 91:117411
 TITLE: Effect of vasoactive drugs on humoral factors of vasomotor regulation - blood kinin system
 AUTHOR(S): Spasov, A. A.
 CORPORATE SOURCE: USSR
 SOURCE: Trudy Volgogradskogo Gosudarstvennogo Meditsinskogo Instituta (1977), 30(3), 83-9
 CODEN: TVLMB8; ISSN: 0376-141X
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The hypertensive compound ethiron [1071-37-0] and the hypotensive compds. No-Spa [985-12-6], RU-13 [23572-32-9], and apressin [86-54-4] all lowered blood kininogen in rats when given i.v. or i.m., which indicates that they activated the kinin system. Ethiron required only 5 min to have this effect while the hypotensive compds. required 15 min. It was not clear whether the activation of the kinin system was a direct result of the action of the compds. or if it was part of the reaction of the organism to the change in blood pressure.
 IT 23572-32-9
 RL: BIOL (Biological study)
 (blood kinin system response to)
 RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



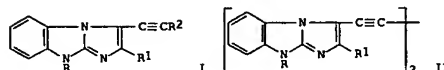
●2 HCl

L4 ANSWER 99 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1979:517412 HCAPLUS
 DOCUMENT NUMBER: 91:117412
 TITLE: Peripheral mechanisms of action of some vasoactive substances
 AUTHOR(S): Petrov, V. I.
 CORPORATE SOURCE: USSR
 SOURCE: Trudy Volgogradskogo Gosudarstvennogo Meditsinskogo Instituta (1977), 30(3), 119-21
 CODEN: TVLMB8; ISSN: 0376-141X
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The hypotensive compds. dibazole [621-72-7], RU-13 [23572-32-9], RU-25 [54381-23-6], RU-32 [67015-51-4], apressin [86-54-4], and No-Spa [985-12-6] each caused dilatation of cat arterial segments in vitro when present at 1:1000-100,000. The compds. also reduced the pressor reactions of the segments to elec. stimulation. RU-13, RU-25, RU-32, and apressin, but not dibazole or No-Spa, decreased the pressor response of the segments to adrenaline.
 IT 23572-32-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (blood vessel response to)
 RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)

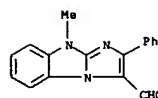


●2 HCl

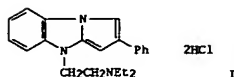
L4 ANSWER 101 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1979:103897 HCAPLUS
 DOCUMENT NUMBER: 90:103897
 TITLE: Synthesis and pharmacological activity of acetylene compounds of the imidazo[1,2-a]benzimidazole series
 AUTHOR(S): Anisimova, V. A.; Avdyunina, N. I.; Simonov, A. M.; Kovalev, G. V.; Simkina, Yu. N.
 CORPORATE SOURCE: Nauchno-Issled. Inst. Fiz. Org. Khim., Rostov Univ., Rostov, USSR
 SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1978), 12(12), 40-5
 CODEN: KHFZAN; ISSN: 0023-1134
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 90:103897
 GI



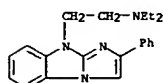
AB Ethynylbenzimidazoles I (R = Me, Et2NCH2CH2, R1 = Ph; R = Me, PhCH2, R1 = Me; R2 = H) were prepared in 53-90% yields by dehydration of the corresponding 3-acetylimidazobenzimidazole with P2O5. Treatment of I (R2 = H) with Me2CO gave 40-54% I (R2 = Me2COH), and treatment with CH2O and Et2NH in the presence of CuCl gave 70-82% I (R2 = CH2NET2). Addnl. obtained were 75 and 87% II (R = Me, R1 = Ph; R = R1 = Me). I (R = Me, R1 = Ph, R2 = H, CH2NET2) were effective as bactericides against Staphylococcus.
 IT 28992-76-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (Wittig reaction with Me (triphenylphosphoranylidene)acetates)
 RN 28992-76-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-3-carboxaldehyde, 9-methyl-2-phenyl- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 102 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1978:499941 HCAPLUS
 DOCUMENT NUMBER: 89:99941
 TITLE: Change in some pharmacological properties in derivatives of imidazole systems
 AUTHOR(S): Vaniya, M. P.; Lyashchenko, I. N.; Simonov, A. M.; Tectov, B. A.; Koblik, A. V.; Anisimova, V. A.; Avdyunina, N. I.
 CORPORATE SOURCE: Rostov, Med. Inst., Rostov, USSR
 SOURCE: Izvestiya Severo-Kavkazskogo Nauchnogo Tsentra Vysheishkoly, Estestvennyye Nauki (1977), 5(3), 46-7
 CODEN: ISTVAY; ISSN: 0321-3005
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI

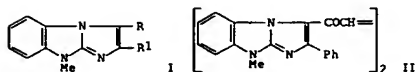


AB Of 13 imidazole derivs. tested, 3 (RU-13 (I) [23572-32-9], RU-32 [67015-51-4], and RUM-17 [34740-37-9]) had analgesic activity in rats; RU-13 was more effective than morphine. The resp. i.p. LD50 values in mice were 675, 131, and 675 mg/kg compared with 308 mg/kg for morphine.
 IT 23572-32-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 RN 23572-32-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)

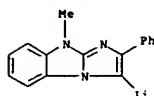


●2 HCl

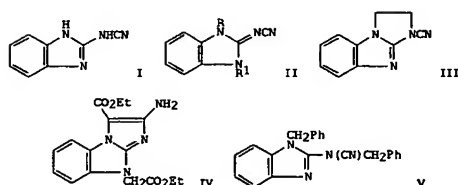
L4 ANSWER 103 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1978:443247 HCAPLUS
 DOCUMENT NUMBER: 89:43247
 TITLE: Studies on derivatives of imidazo[1,2-a]benzimidazole. XVI. Synthesis of 3-alkoxycarbonyl-2-arylimidazo[1,2-a]benzimidazoles
 AUTHOR(S): Kuz'menko, T. A.; Anisimova, V. A.; Avdyunina, N. I.; Simonov, A. M.
 CORPORATE SOURCE: Rostov, Gos. Univ., Rostov, USSR
 SOURCE: Khimiya Geterotsiklicheskh Soedinenii (1978), (4), 522-5
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



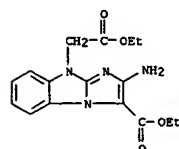
AB The title compds. I (R = CO2Me; R1 = Ph, 2-ClO4) were obtained in 93 and 95% yields by treating I (R = H) with Cl3CCOCl to give 41 and 43. I (R = COCCl3) followed by heating with NaOMe. I (R = CO2H, R1 = Ph) was obtained in 94% yield by carbonation of I (R = Li) with CO2. Addnl. obtained was 52% II.
 IT 67073-21-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 67073-21-6 HCAPLUS
 CN Lithium, (9-methyl-2-phenyl-9H-imidazo[1,2-a]benzimidazol-3-yl)- (9CI) (CA INDEX NAME)



L4 ANSWER 104 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1978:135933 HCAPLUS
 DOCUMENT NUMBER: 88:135933
 TITLE: Alkylation of some cyano derivatives of benzimidazoles
 AUTHOR(S): Serafin, Barbara; Konopski, Leszek; Stolarczyk, Leszek
 CORPORATE SOURCE: Inst. Org. Chem. Technol., Polytech. Univ., Warsaw, Pol.
 SOURCE: Roczniki Chemii (1977), 51(12), 2355-68
 CODEN: ROCHAC; ISSN: 0035-7677
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 88:135933
 GI



AB The IR of I indicates that it exists as the tautomer II (R = R1 = H). This is supported by the alkylation products (II; R = H, R1 = CH2Ph, CH2CH:CH2; R = R1 = Me, PhCH2) of I and Me2SO4, PhCH2Cl, or PhCH2Br in DMF containing NaH. The reaction of I with BrCH2CH2Br gives III in which the cyanoamino tautomeric form occurs. BrCH2CO2Et and II (R = R1 = H) gives IV via a Thorpe type cyclization. I and PhCH2Cl or PhCH2Br gives V. The mechanism of the alkylation reactions is discussed.
 IT 66094-39-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 66094-39-1 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-acetic acid, 2-amino-3-(ethoxycarbonyl)-, ethyl ester (9CI) (CA INDEX NAME)

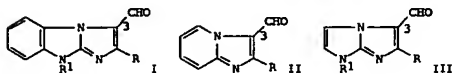


L4 ANSWER 104 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

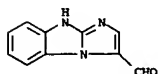
L4 ANSWER 105 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1977:552204 HCAPLUS
 DOCUMENT NUMBER: 87:152204
 TITLE: Condensed imidazole carboxaldehydes
 INVENTOR(S): Simonov, A. M.; Anisimova, V. A.; Avdyunina, N. I.
 PATENT ASSIGNEE(S): Rostov State University, USSR
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obratzy, Tovarnye Znaki 1977, 54(23), 76-7.
 CODEN: UROOAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 562554	T	19770625	SU 1975-2104599	19750211
PRIORITY APPLN. INFO.:			SU 1975-2104599	A 19750211

GI

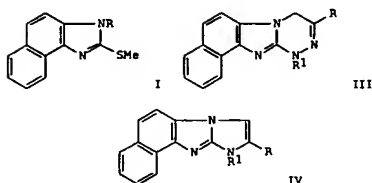


AB Title compds. I-III [R = H, Me, Ph, halophenyl, naphthyl; R1 = Me, PhCH2, (dialkylamino)alkyl] were prepared by treating the corresponding 3-unsubstituted condensed imidazoles with Cl3CCHO and hydrolyzing the resulting 3-(1-hydroxy-3,3,3-trichloroethyl) derivs.
 IT 64196-74-3DP, derivs.
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 64196-74-3 HCAPLUS
 CN 1H-imidazo[1,2-a]benzimidazole-3-carboxaldehyde (9CI) (CA INDEX NAME)

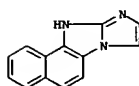


L4 ANSWER 106 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1977:453159 HCAPLUS
 DOCUMENT NUMBER: 87:53159
 TITLE: Synthesis, structure, and reactivity of N-substituted 2-methylmercaptanaphth[1,2-d]imidazoles
 AUTHOR(S): Povstyanol, M. V.; Kochergin, P. M.; Yakubovskii, E. A.
 CORPORATE SOURCE: Odess. Tekhnol. Inst. Pishchevoi Prom. im. Lomonosova, Kherson, USSR
 SOURCE: Tezisy Dokl. - Nauchno-Tekh. Konf. "Khim. Primen. Formazanov", 2nd (1975), Meeting Date 1974, 26-8. Editor(s): Lipunov, G. N. Ural. Politekh. Inst.: Sverdlovsk, USSR.
 CODEN: 352AAU
 LANGUAGE: Russian
 CONFERENCE:

DOCUMENT TYPE:
 LANGUAGE:
 GI

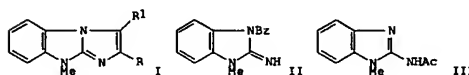


AB Naphthimidazole I [R = CH2OOR1 (R1 = aryl) (II), obtained from I (R = H), on treatment with R2NH2 (R2 = H, alkyl, aryl, heterocyclic) gave the corresponding hydrazones at <100° and the triazines III at >100°. Similarly II and R3NH2 (R3 = H, alkyl, aryl) gave imidazoles IV (no data).
 IT 36759-83-8DP, alkyl and aryl derivs.
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 36759-83-8 HCAPLUS
 CN 10H-imidazo[1,2-a]naphth[1,2-d]imidazole (9CI) (CA INDEX NAME)

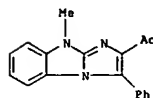


L4 ANSWER 106 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

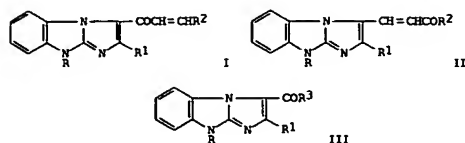
L4 ANSWER 107 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1977:189804 HCAPLUS
 DOCUMENT NUMBER: 86:189804
 TITLE: Studies of imidazo[1,2-a]benzimidazoles. XV. The 2-acyl-substituted imidazo[1,2-a]benzimidazoles
 AUTHOR(S): Koshchlenko, Yu. V.; Suvorova, G. M.; Simonov, A. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1977), (1), 111-15
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



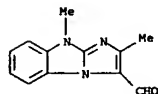
AB Imidazobenzimidazoles I (R = COMe, COPh, R1 = Ph) were obtained in 58 and 61% yields by cyclization of II with BrCH2COR. I (R = H, R1 = Me, Ph) were obtained in 52% from III by treatment with Na, condensation with BrCH2COR1, hydrolysis, and cyclization. Addnl. obtained were 58 and 80% I (R = COPh, COMe, R1 = Me).
 IT 55558-59-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 55558-59-3 HCAPLUS
 CN Ethanone, 1-(9-methyl-3-phenyl-9H-imidazo[1,2-a]benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



L4 ANSWER 109 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1977:171326 HCAPLUS
 DOCUMENT NUMBER: 86:171326
 TITLE: Research on imidazo[1,2-a]benzimidazole derivatives.
 XIV. α,β -Unsaturated ketones of
 imidazo[1,2-a]benzimidazole series
 AUTHOR(S): Anisimova, V. A.; Avdyunina, M. I.; Simonov, A. M.;
 Kovalov, G. V.; Gofman, S. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1976), (12),
 1660-5
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



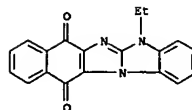
AB The title compds. I (R = Me, CH₂CH₂NEt₂, R₁ = Me, Ph, R₂ = Ph, p-MeOC₆H₄, p-O₂NC₆H₄, m-O₂NC₆H₄, 2-furyl, 5-nitro-2-furyl, p-Me₂NC₆H₄) and II (R = Me, R₁ = Me, Ph, R₂ = Ph, p-MeOC₆H₄, m-O₂NC₆H₄, 1-naphthyl, 2-furyl) were obtained in 34-98% yields by base-catalyzed condensation of III (R = Me, R₁ = Me, Ph, R₃ = Me, H; R = CH₂CH₂NEt₂, R₁ = Ph, R₃ = Me) with the corresponding aldehyde or ketone. I and II were useful as antihypertensives.
 IT 28992-72-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation of, with aldehydes and ketones)
 RN 28992-72-5 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-3-carboxaldehyde, 2,9-dimethyl- (8CI, 9CI)
 (CA INDEX NAME)



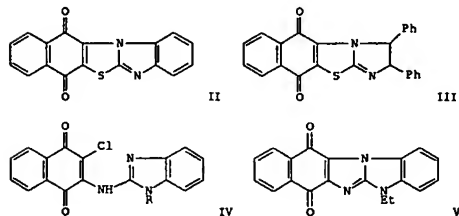
L4 ANSWER 109 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1976:523818 HCAPLUS
 DOCUMENT NUMBER: 85:123818
 TITLE: Studies on benzimidazole derivatives. XL. Reaction of mercapto derivatives of azoles with haloquinones
 AUTHOR(S): Simonov, A. M.; Komissarov, V. N.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1976), (6),
 783-5
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 85:123818
 GI

L4 ANSWER 109 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L4 ANSWER 109 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

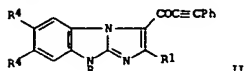
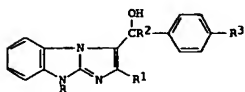


● HCl



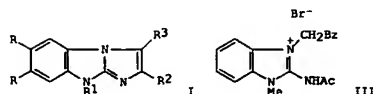
AB Reaction of 2-mercaptobenzimidazole with 2,3-dichloro-1,4-naphthoquinone (I) gave 70.7% II; III was prepared in 67% yield in a similar manner. Naphthoquinones IV (R = Et, PhCH₂) were prepared in 43 and 40% yield, resp., by reaction of the corresponding benzimidazole with I. Treatment of IV (R = Et) with glacial HOAc gave 77% V.
 IT 60463-72-19
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 60463-72-1 HCAPLUS
 CN 5H-Naphth[2',3':4,5]imidazo[1,2-a]benzimidazole-7,12-dione, 5-ethyl-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 110 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1976:421209 HCAPLUS
 DOCUMENT NUMBER: 85:21209
 TITLE: Studies in the area of derivatives of imidazo[1,2-a]benzimidazole. XIII. Synthesis and properties of alcohols of the imidazo[1,2-a]benzimidazole series
 AUTHOR(S): Anisimova, V. A.; Avdyunina, N. I.; Simonov, A. M.; Kovalev, G. V.; Gofman, S. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1976), (1), 126-34
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 85:21209
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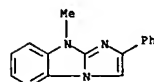


AB The imidazobenzimidazolemethanols I (R = Me, PhCH2, Et2NCH2CH2; R1 = Me, Ph, α-naphthyl, 4-BrC6H4; R2 = H, Me; R3 = H, Me2N, EtO) were prepared by reaction of 3-lithioimidazo[1,2-a]benzimidazoles with 4-R3C6H4COR2 or by Grignard reaction of 4-R3C6H4Br with 3-acetyl- or 3-formylimidazo[1,2-a]benzimidazoles. The ethynyl alcs. II (R = Me, Et; R1 = Me, Ph; R4 = H, Me) were prepared by condensation of the appropriate 3-formylimidazo[1,2-a]benzimidazoles with PhC.tplbond.CHgBr and subsequent hydrolysis and MnO2 oxidation. Hydrochloride salts of I in EtOH possessed hypotensive activity in the rats; e.g. I (R = R1 = Me, R2 = H = R3 = H).HCl (III) at 3 mg/kg decreased arterial blood pressure 50% after 15 min. However, III was toxic at 5 mg/kg.
 IT 21431-84-5
 RL: RCT (Reactant); RACT (Reactant or reagent) (bromination and formylation of)
 RN 21431-84-5 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 2-phenyl-9-(phenylmethyl)- (9CI) (CA INDEX NAME)

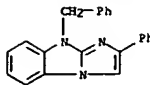
L4 ANSWER 111 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1976:421208 HCAPLUS
 DOCUMENT NUMBER: 85:21208
 TITLE: Studies in the area of derivatives of imidazo[1,2-a]benzimidazole. XII. 3-Acyl derivatives of imidazo[1,2-a]benzimidazole
 AUTHOR(S): Anisimova, V. A.; Simonov, A. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1976), (1), 121-5
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 85:21208
 GI



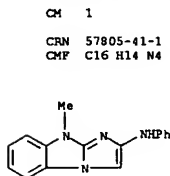
AB Acetylation of the imidazobenzimidazoles I (R = H, Me; R1 = Me, Et, PhCH2; R2 = Me, Ph, 4-BrC6H4; R3 = H) by Ac2O gave the corresponding I (R3 = Ac). I (R = H; R1 = Me; R2 = Me, Ph; R3 = Bz), which were not stable under acidic conditions, were prepared by benzoylation of I (R3 = H) (II) by BzCl in the presence of pyridine or by reaction of BzCl with excess II. Alternately, I (R = H, R1 = R2 = Me, R3 = Bz) was prepared by cyclization of the benzimidazole III in DMF containing Et3N.
 IT 21431-82-3
 RL: RCT (Reactant); RACT (Reactant or reagent) (acylation of)
 RN 21431-82-3 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 9-methyl-2-phenyl- (8CI, 9CI) (CA INDEX NAME)



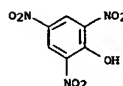
L4 ANSWER 110 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L4 ANSWER 112 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1976:43937 HCAPLUS
 DOCUMENT NUMBER: 84:43937
 TITLE: Imidazo[1,2-a]benzimidazole derivatives. XI. Synthesis of 2-arylamino derivatives of 9-methylimidazo[1,2-a]benzimidazole
 AUTHOR(S): Simonov, A. M.; Kuz'menko, T. A.; Nachinnennaya, L. G.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1975), (10), 1394-8
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 84:43937
 GI For diagram(s), see printed CA Issue.
 AB Imidazobenzimidazoles (I, R = H, Me, R1 = Ph, p-O2NCH4, p-ClC6H4, p-EtO2CC6H4) were obtained in 90-5% yields by reaction of 1-methyl-2-aminobenzimidazole with ClCH2CONRR1 to give imines II which were cyclized by POC13.
 IT 57805-42-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 57805-42-2 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazol-2-amine, 9-methyl-N-phenyl-, compd. with 2,4,6-trinitrophenol (1:1) (9CI) (CA INDEX NAME)



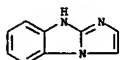
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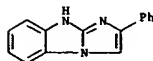
L4 ANSWER 113 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1976:17339 HCAPLUS
 DOCUMENT NUMBER: 84:17339
 TITLE: 2-Acylamino-9-alkylimidazo[1,2-a]benzimidazole
 INVENTOR(S): Simonov, A. M.; Borisova, T. A.
 PATENT ASSIGNEE(S): Rostov State University, USSR
 SOURCE: U.S.S.R. Prom: Otkrytiya, Izobret., Prom. Obratst.,
 Tovarnye Znaki 1975, 52(27), 70.
 CODEN: UROKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 478007	T	19750725	SU 1973-1897003	19730319
SU 1973-1897003	A	19730319		

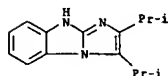
PRIORITY APPLN. INFO.:
 GI For diagram(s), see printed CA Issue.
 AB Imidazobenzimidazoles I (R = Ac, R1 = Ph, p-O2NC6H4; R = Me, R1 = Ph; R2 = alkyl) were prepared by reaction of 1-alkyl-2-aminobenzimidazole with anilides of ClCH2CO2H followed by cyclization of the resulting compound in the presence of POC13.
 IT 247-79-00P, 1H-Imidazo[1,2-a]benzimidazole, acetamide derivative, 9-alkyl derivs.
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 247-79-0 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



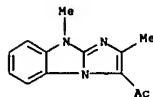
L4 ANSWER 114 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:606163 HCAPLUS
 DOCUMENT NUMBER: 83:206163
 TITLE: Mass spectra of pyrrolo [1,2-a]benzimidazole and imidazo[1,2-a] benzimidazole derivatives
 AUTHOR(S): Anisimova, O. S.; Sheinker, Yu. N.; Palei R. M.; Kochergin, P. M.; Ponomar, V. S.
 CORPORATE SOURCE: Vses. Nauchno. Issled. Khim.-Farm. Inst. im Ordzhonikidze, Moscow, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1975), (8), 1124-7
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB Mass spectra of the previously prepared pyrrolobenzimidazoles (I, R = Me, H, PhCH2, R1 = H, Me) and imidazobenzimidazoles (II, R = H, Me, Ph, R1 = Ph, Me) were determined
 IT 23085-25-8
 RL: PRP (Properties) (mass spectrum of)
 RN 23085-25-8 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole, 2-phenyl- (8CI, 9CI) (CA INDEX NAME)



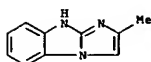
L4 ANSWER 115 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:521574 HCAPLUS
 DOCUMENT NUMBER: 83:121574
 TITLE: Recent developments in the study of heterocyclic amine extraction chemistry. Application of the formation of intramolecular hydrogen bonding between ligand and coordinated anions in salt extraction
 AUTHOR(S): Dzionko, V. M.; Ivanov, O. V.; Avilina, V. N.; Ivashchenko, A. V.; Kazarova, T. S.
 CORPORATE SOURCE: All-Union Sci. Res. Inst. Chem. Reagents Ultra High Purity Chem. Subst., Moscow, USSR
 SOURCE: Proc. Int. Solvent Extr. Conf. (1974), Volume 2, 1893-906. Editor(s): Jeffreys, G. V. Soc. Chem. Ind.: London, Engl.
 CODEN: 30XIAE
 CONFERENCE
 DOCUMENT TYPE: English
 AB Heterocyclic amines (3,4,5-triethylpyrazoles and bicyclic amidines) were prepared and used to extract transition metal inorg. salts. Formation of intramol. H bonds between amine and anion of the salt stabilized the extracted species. Maximum selectivity is observed in nitrate or sulfate systems.
 IT 42183-30-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and extraction capacity of, for transition metals)
 RN 42183-30-2 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole, 2,3-bis(1-methylethyl)- (9CI) (CA INDEX NAME)



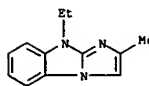
L4 ANSWER 116 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:514295 HCAPLUS
 DOCUMENT NUMBER: 83:114295
 TITLE: 3-Ethynylimidazo[1,2-a]benzimidazoles
 AUTHOR(S): Avdyunina, N. I.; Anisimova, V. A.; Simonov, A. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1974), (11), 1577-8
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB Azoles (I, R = Me, PhC112, CH2CH2NET2; R1 = Ph, Me; R2 = C.tpbond.CH) were obtained in 70-85% yields by treatment of I (R2 = COMe) with POC13-DMF followed by treatment with KOAc.
 IT 40783-90-2
 RL: RCT (Reactant); RACT (Reactant or reagent) (dehydration of)
 RN 40783-90-2 HCAPLUS
 CN Ethanone, 1-(2,9-dimethyl-9H-imidazo[1,2-a]benzimidazol-3-yl)- (9CI) (CA INDEX NAME)



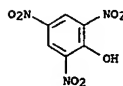
L4 ANSWER 117 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:479148 HCAPLUS
 DOCUMENT NUMBER: 83:79148
 TITLE: Benzimidazole derivatives. XXXVI. Synthesis and transformations of N-propargyl derivatives of 2-aminobenzimidazole
 AUTHOR(S): Popov, I. I.; Tkachenko, P. V.; Simonov, A. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1975), (4), 523-5
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB 2-Aminobenzimidazole (I, R = H) treated with BrCH₂C.tplbond.CH in NaNH₂-NH₃ (I) gave 82% I (R = CH₂C.tplbond.CH), which was rearranged by KOH to give 94% I (R = CH₂C:CH₂) and cyclized by NaOEt-EtOH to yield 83% imidazobenzimidazole (II). Heating I (R = H) with BrCH₂C.tplbond.CH in boiling alc. gave 46% quaternary bromide which was treated with concentrated NH₄OH to give 95% imine (III, R = CH₂C.tplbond.CH). The latter was rearranged by KOH to give 89% III (R = CH₂C:CH₂) and cyclized to give 50% IV (R = CH₂C:CH₂). The latter with alc. KOH at 20° gave 80% IV [CH₂C(OEt):CH₂].
 IT 30645-56-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 30645-56-8 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 2-methyl- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 118 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:429154 HCAPLUS
 DOCUMENT NUMBER: 83:28154
 TITLE: Benzimidazole derivatives. XXXV. Synthesis and transformations of 1-alkyl-3-(propyn-2'-yl)-2-iminobenzimidazolines
 AUTHOR(S): Popov, I. I.; Tkachenko, P. V.; Simonov, A. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1975), (3), 396-400
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 83:28154
 GI For diagram(s), see printed CA Issue.
 AB Iminobenzimidazolines (I, R = Me, Et, PhCH₂, R₁ = H) were obtained in 95-7% yields by alkylation of II with BrCH₂C.tplbond.CH followed by treatment with NH₄OH. I (R = Me, Et, PhCH₂, R₁ = Me, Ac, CH₂OH) were obtained in 58-85% yields by alkylation, acetylation, and hydromethylation of I (R₁ = H), resp. Cyclization of III (R = Me, Et, PhCH₂), obtained by rearrangement of the corresponding I, gave 93-5% imidazobenzimidazoles (IV).
 IT 22492-28-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 22492-28-0 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 9-ethyl-2-methyl-, compd. with 2,4,6-trinitrophenol (1:1) (9CI) (CA INDEX NAME)
 CH 1
 CKN 46393-22-0
 CHF C12 H13 N3

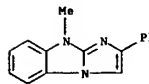


CH 2
 CKN 88-89-1
 CHF C6 H3 N3 O7

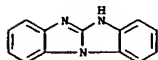


L4 ANSWER 118 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

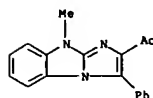
L4 ANSWER 119 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:170796 HCAPLUS
 DOCUMENT NUMBER: 82:170796
 TITLE: Imidazo [1,2-a]benzimidazole derivatives. X. Nitration of 2,9-disubstituted imidazo [1,2-a]benzimidazole
 AUTHOR(S): Anisimova, V. A.; Simonov, A. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1975), (2), 258-62
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 82:170796
 GI For diagram(s), see printed CA Issue.
 AB 2,9-Dimethylimidazo[1,2-a]benzimidazole-HNO₃ was treated with concentrated H₂SO₄ at -5 to -10° to give 88% 3-nitro-2,9-dimethylimidazo[1,2-a]benzimidazole, whereas nitration of 9-methyl-2-phenylimidazo[1,2-a]benzimidazole gave a mixture of the isomeric dinitroimidazobenzimidazoles I. The benzimidazoles II (R = Me, H; R₁ = Me, Et) were N-alkylated by R₃CGH₄COCH₂Br (R₃ = 2-NO₂, 3-NO₂, 4-NO₂) and then cyclized by treatment with HCl or POCl₃ to give the imidazobenzimidazoles III.
 IT 21431-82-3
 RL: RCT (Reactant); RACT (Reactant or reagent) (nitration of)
 RN 21431-82-3 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 9-methyl-2-phenyl- (8CI, 9CI) (CA INDEX NAME)



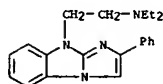
L4 ANSWER 120 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:156175 HCAPLUS
 DOCUMENT NUMBER: 82:156175
 TITLE: 10 \times Electrons aromatic systems derived from 3a-azapentalene. XVI. Benzimidazo[1,2-a]benzimidazole series
 AUTHOR(S): De Mendoza, J. J. Elguero, J.
 CORPORATE SOURCE: Fac. Pharm., Univ. Barcelona, Barcelona, Spain
 SOURCE: Bulletin de la Societe Chimique de France (1974), (12, Pt. 2), 2987-8
 CODEN: BSCFAS; ISSN: 0037-8968
 DOCUMENT TYPE: Journal
 LANGUAGE: French
 GI For diagram(s), see printed CA Issue.
 AB Benzimidazo[1,2-a]benzimidazole (I) and its 1-methyl derivative were obtained by photolysing 2-(1-benzotriazolyl)benzimidazole and its 1-methyl derivative. The salts II (R = R1 = Me, X = iodo; R1 = (CH2)3, (CH2)4, X = Br) were obtained by alkylating I.
 IT 28890-99-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and alkylation of)
 RN 28890-99-5 HCAPLUS
 CN 5H-Benzimidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 121 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:140013 HCAPLUS
 DOCUMENT NUMBER: 82:140013
 TITLE: New synthesis of imidazo[1,2-a]benzimidazole derivatives
 AUTHOR(S): Koshchlenko, Yu. V.; Suvorova, G. M.; Simonov, A. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1975), (1), 140-1
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB The iminobenzimidazole I cyclized with RCOCH2Br (R = Me, Ph) in DMF at 80-90° to give the title compds. II in 58 and 61% yields, resp.
 IT 55558-59-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 55558-59-3 HCAPLUS
 CN Ethanone, 1-(9-methyl-3-phenyl-9H-imidazo[1,2-a]benzimidazol-2-yl)- (9CI) (CA INDEX NAME)

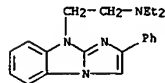


L4 ANSWER 122 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:118900 HCAPLUS
 DOCUMENT NUMBER: 82:118900
 TITLE: Effect of some benzimidazole and quinoxaline derivatives on bulbar mechanisms of regional circulation regulation
 AUTHOR(S): Tyurenkov, I. N.
 CORPORATE SOURCE: Volgograd. Med. Inst., Volgograd, USSR
 SOURCE: Mater., Povolzh. Konf. Fiziol. Uchastiem Biokhim., Farmakol. Morfol., 6th (1973), Volume 2, 63-4.
 Editor(s): Anikin, G. D. Chuv. Gos. Univ.: Cheboksary, USSR.
 CODEN: 2912A6
 DOCUMENT TYPE: Conference
 LANGUAGE: Russian
 AB When administered to cats at 5 mg/kg before elec. stimulation of the bulbar structures, the preparation RU 13 [23572-32-9], a benzimidazole derivative, decreased the neurogenic vascular tonus in the hind limb by 50-60% and that in the small intestine by 25%; systemic arterial pressure was decreased by 35%. The preparation RU 25 [54381-23-6], a quinoxaline derivative, at 5 mg/kg decreased the perfusion pressure in the hind limb by 45% and that in the intestinal vessels by 10%; systemic arterial pressure was decreased by 25%. The preparation RU 30 [54381-22-5], also a quinoxaline derivative, at 5 mg/kg decreased the systemic arterial pressure and the vascular tonus in the limb and intestine by 40-50%.
 IT 23572-32-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (blood pressure regulation by medulla oblongata response to)
 RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

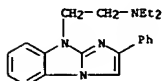
L4 ANSWER 123 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:80662 HCAPLUS
 DOCUMENT NUMBER: 82:80662
 TITLE: Action of some new benzimidazole derivatives during experimental anemic hypertension
 AUTHOR(S): Pan'shina, M. V.
 CORPORATE SOURCE: Volgograd. Med. Inst., Volgograd, USSR
 SOURCE: Mater., Povolzh. Konf. Fiziol. Uchastiem Biokhim., Farmakol. Morfol., 6th (1973), Volume 2, 49.
 Editor(s): Anikin, G. D. Chuv. Gos. Univ.: Cheboksary, USSR.
 CODEN: 2912A6
 DOCUMENT TYPE: Conference
 LANGUAGE: Russian
 AB When administered to dogs with anemic hypertension in 15-18 s.c. injections for 2.5-3 weeks, the preparation RU-13 [23572-32-9], a benzimidazole derivative, significantly decreased the arterial pressure. Dibazole [621-72-7] (10 mg/kg, s.c.) produced a similar effect after 24-36 injections during a 4-6 week period.
 IT 23572-32-9
 RL: BIOL (Biological study) (antihypertensive)
 RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

L4 ANSWER 124 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:361 HCAPLUS
 DOCUMENT NUMBER: 82:361
 TITLE: Central vasomotor action of dibazole and its imidazo analog
 AUTHOR(S): Kovalov, G. V.; Morozov, I. S.; Tyurenkov, I. M.
 CORPORATE SOURCE: Volgograd. Med. Inst., Volgograd, USSR
 SOURCE: Farmakologiya i Toksikologiya (Moscow) (1974), 37(5), 558-62
 CODEN: FATOAO; ISSN: 0014-8318
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian

GI For diagram(s), see printed CA Issue.
 AB In exper., on decerebrate, anesthetized, spinal, and curarized cats, dibazole [521-72-7] was shown to have a central component in its mechanism of vasomotor action. The imidazo analog PY-13 [9-(*N*-diethylaminoethyl)-2-phenylimidazo[1,2-*a*]benzimidazole-ZHCl] (I) [23572-32-9], inhibited the central component at 0.2-1 mg/kg and at 5-15 mg/kg also showed weak ganglion blocking and adrenolytic activity. Small doses of I showed different inhibitory effects on the mechanisms regulating neurogenic toxicity in blood vessels of the small intestines, kidneys, and hind limbs.
 IT 23572-32-9
 RL: BIOL (Biological study)
 (blood vessel response to, central nervous system in regulation of)
 RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-*a*]benzimidazole-9-ethanamine, *N,N*-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)

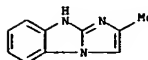


● 2 HCl

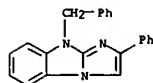
L4 ANSWER 125 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1974:133437 HCAPLUS
 DOCUMENT NUMBER: 80:133437
 TITLE: 2-Methylimidazo [1,2-*a*]benzimidazole derivatives
 INVENTOR(S): Simonov, A. M.; Tkachenko, P. V.; Popov, I. I.
 PATENT ASSIGNEE(S): Rostov State University
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obratsty, Tovarnye Znaki 1974, 57(5), 85.
 CODEN: UROKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 414260	T	19740205	SU 1972-1742359	19720128

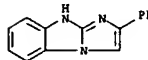
PRIORITY APPLN. INFO.:
 GI For diagram(s), see printed CA Issue.
 AB Imidazobenzimidazoles I (R = alkyl, aryl, alkynyl) were prepared by condensing the resp. N-substituted 2-aminobenzimidazoles with HC.tplbond.CCH2Br in an organic solvent and then treating with aqueous NH3 and then a strong base.
 IT 30645-56-BDP, 9H-Imidazo[1,2-*a*]benzimidazole, 2-methyl-, deriva.
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 30645-56-8 HCAPLUS
 CN 9H-Imidazo[1,2-*a*]benzimidazole, 2-methyl- (8CI, 9CI) (CA INDEX NAME)



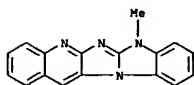
L4 ANSWER 126 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1973:505140 HCAPLUS
 DOCUMENT NUMBER: 79:105140
 TITLE: Imidazo[1,2-*a*]benzimidazole derivatives. VII. Debenzylation of 9-benzyl-2-phenyl(methyl)imidazo[1,2-*a*]benzimidazole
 AUTHOR(S): Anisimova, V. A.; Simonov, A. M.; Borisova, T. A.
 CORPORATE SOURCE: Nauchno-Issled. Inst. Fiz. Org. Khim., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskich Soedinenii (1973), (6), 791-6
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB Debenzylation of benzimidazole (I; R = CH2Ph, R1 = Ph) with Na in liquid NH3 gave 30% imidazole (I; R = H, R1 = Ph) and 26% dihydro derivative (II; R = H).
 Alkylation of II by MeI in the presence of NaNH2 gave quant. Me derivative (II; R = Me); alkylation in EtOH gave 70% methiodide which was treated with NaHCO3 to yield 60% Me derivative (III). Debenzylation of I (R = CH2Ph, R1 = Me) gave quant. benzimidazole (IV).
 IT 21431-84-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (debenzylation of, by sodium in liquid ammonia)
 RN 21431-84-5 HCAPLUS
 CN 9H-Imidazo[1,2-*a*]benzimidazole, 2-phenyl-9-(phenylmethyl)- (9CI) (CA INDEX NAME)



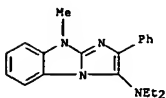
L4 ANSWER 127 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1973:492108 HCAPLUS
 DOCUMENT NUMBER: 79:92108
 TITLE: Imidazo[1,2-*a*]benzimidazole derivatives. VIII. 1H- and 1-methyl-2-phenylimidazo[1,2-*a*]benzimidazoles and their reactivity
 AUTHOR(S): Anisimova, V. A.; Simonov, A. M.; Pozharskii, A. F.
 CORPORATE SOURCE: Nauchno-Issled. Inst. Fiz. Org. Khim., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskich Soedinenii (1973), (6), 797-802
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB Treatment of 2-aminobenzimidazole with PhCOCH2Br in Me2CO gave 41% diphenacyl derivative (I) and 56% monophenacyl derivative (II). Cyclization of I in boiling HCl yielded quant. the imidazobenzimidazole (III). Analogously II afforded 91% IV.
 IT 23085-25-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 23085-25-8 HCAPLUS
 CN 1H-Imidazo[1,2-*a*]benzimidazole, 2-phenyl- (8CI, 9CI) (CA INDEX NAME)



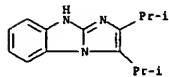
L4 ANSWER 128 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1973:492104 HCAPLUS
 DOCUMENT NUMBER: 79:92104
 TITLE: Imidazo[1,2-a]benzimidazole derivatives. IX. Compounds of the 2-oxo-2,3-dihydroimidazo[1,2-a]benzimidazole series and their transformations
 AUTHOR(S): Borisova, T. A.; Simonov, A. M.; Anisimova, V. A.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1973), (6), 803-6
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 G1 For diagram(s), see printed CA Issue.
 AB Hydrolysis of imidazobenzimidazole (I; R = Me) by HCl yielded 92% benzimidazole (II; X = NH.HCl), which was nitrosated by NaNO₂ to give 15% II (X = NNO). Basic hydrolysis of I afforded the keto acid (II; X = O). Oxidation of I by KMnO₄ gave azo derivative (III). 3-Arylideneimidazobenzimidazoles (IV; X = p-O₂NC₆H₄CH=, 5-nitro-2-furylidene, o-O₂NC₆H₄CH=; R = Me, PhCH₂) were prepared in 62-76% yields by condensation of I with the appropriate aldehyde.
 IT 43182-01-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 43182-01-0 HCAPLUS
 CN 7H-Benzimidazo[1',2':1,2]imidazo[4,5-b]quinoline, 7-methyl- (9CI) (CA INDEX NAME)



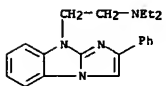
L4 ANSWER 129 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1973:466246 HCAPLUS
 DOCUMENT NUMBER: 79:66246
 TITLE: Benzimidazoles and related compounds. V. Reaction of 2-azido-1-methylbenzimidazole with unsaturated compounds
 AUTHOR(S): Shiohawa, Youichi; Ohki, Sadao
 CORPORATE SOURCE: Tokyo Coll. Pharm., Tokyo, Japan
 SOURCE: Chemical & Pharmaceutical Bulletin (1973), 21(5), 981-8
 CODEN: CPBTAL; ISSN: 0009-2363
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 G1 For diagram(s), see printed CA Issue.
 AB Cycloaddn. reactions of 2-azido-1-methylbenzimidazole (I) with Ph₂C:CO (II), MeO₂C.tplbond.CO₂Me (III), CH.tplbond.CO₂Me (IV), and N,N-diethylphenylethynylamine (V) were investigated. III reacted with the carbon-nitrogen double bond of the imidazole ring to give the 1:1 molar adduct VI. V added to the azido group at the C-2 position and VII was obtained. Reaction of I with IV gave a mixture of VIII as the major product and the 1:1 molar adduct IX. II exothermically reacted with I and gave 2,3-dihydro-9-methyl-3-oxo-2,2-diphenyl-9H-imidazo[1,2-a]benzimidazole (X).
 IT 43002-82-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 43002-82-0 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazol-3-amine, N,N-diethyl-9-methyl-2-phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 130 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1973:460988 HCAPLUS
 DOCUMENT NUMBER: 79:60988
 TITLE: Complexes of 2,3-diisopropyl-1H-imidazo[1,2-a]benzimidazole with cobalt(II) and nickel(II) chlorides
 AUTHOR(S): Dziomko, V. M.; Ivashchenko, A. V.
 CORPORATE SOURCE: USSR
 SOURCE: Zhurnal Obshchei Khimii (1973), 43(6), 1330-3
 CODEN: ZOKHDM; ISSN: 0044-460X
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB 2,3-Diisopropyl-1H-imidazo[1,2-a]benzimidazole (I) reacts with NiCl₂ or CoCl₂ in C₆H₆ to give NiL₂Cl₂ or CoL₂Cl₂, resp. The ir bands of NH groups in the complexes show shifts indicating intramol. H bonding between the NH of the ligand and the chloro group forming a 6-atom ring. POCl₃ and Et₃N converted 4,5-diisopropyl-4-oxazolin-2-one to 2-chloro-4,5-diisopropyl-4-oxazolin-2-one, which with o-C₆H₄(NH₂)₂ in hot xylene gave L.
 IT 42183-30-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 42183-30-2 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole, 2,3-bis(1-methylethyl)- (9CI) (CA INDEX NAME)

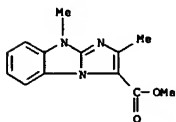


L4 ANSWER 131 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1973:154693 HCAPLUS
 DOCUMENT NUMBER: 78:154693
 TITLE: Relation between the chemical structure and the hypotensive activity of new benzimidazole and quinoxaline derivatives
 AUTHOR(S): Kovalev, G. V.; Gofman, S. M.; Ivanovskaya, S. V.; Pan'shina, M. V.; Petrov, V. I.; Simonov, A. M.; Tyurenkov, I. M.
 CORPORATE SOURCE: Volgogr. Med. Inst., Volgograd, USSR
 SOURCE: Farmakologiya i Toksikologiya (Moscow) (1973), 36(2), 232-8
 CODEN: FATOAO; ISSN: 0014-8318
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB 9-(N-Diethylaminoethyl)-2-phenylimidazo[1,2-a]benzimidazole-2HCl (I) [23572-32-9] was the strongest hypotensive agent of 8 imidazo[1,2-a]benzimidazole derivs. tested in normal rats and cats and was comparable in potency to imidazo[1,2-a]quinoxaline (II) [235-05-2] and 7-methoxyimidazo[1,2-a]quinoxaline [39744-68-8]. II and its methoxy derivative were, however, less toxic than I in mice. The hypotensive action of I and II was 3-10 times stronger and 10-50 times longer in duration than that of dibazole [621-72-7]. I (10 mg/kg, s.c., or 20 mg/kg, oral) administered daily for 1 month normalized blood pressure in rabbits and dogs with pituitrin- or ischemia-induced hypertension. Allyl- and propargylbenzimidazole derivs. did not affect blood pressure.
 IT 23572-32-9
 RL: BIOL (Biological study) (hypotension from)
 RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)

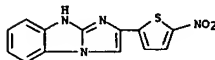


● 2 HCl

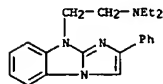
L4 ANSWER 132 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1973:97556 HCAPLUS
 DOCUMENT NUMBER: 78:97556
 TITLE: Imidazo[1,2-a]benzimidazole derivatives. VI. Preparation of imidazo[1,2-a]benzimidazole derivatives from 1-alkyl- or 1-aryl-2-iminobenzimidazole-3-acetic acids and their esters
 AUTHOR(S): Simonov, A. M.; Anisimova, V. A.; Borisova, T. A.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1973), (1), 111-14
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB Imidazo[1,2-a]benzimidazole derivs. (I; R = Me, PhCH₂, R₁ = H) were prepared in approx. 90% yields by acetylation of benzimidazoleacetic acids (II, R = Me, PhCH₂; R₂ = Me) with Ac₂O to give acetylmino derivs. which were cyclodehydrated by further treatment with Ac₂O to yield 82-9% imidazobenzimidazolecarboxylates, which were then decarboxylated by HCl. Treatment of I with Ac₂O for 3-5 min gave 85-90% ketones (III; R = Me, PhCH₂). Ketone (III; R = Me) treated with Ac₂O for 3 hr gave 87% acetyl derivative I (R = Me, R₂ = Ac).
 IT 40783-82-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 40783-82-2 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-3-carboxylic acid, 2,9-dimethyl-, methyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 133 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1973:4212 HCAPLUS
 DOCUMENT NUMBER: 78:4212
 TITLE: Synthesis of nitroheterocycles. I. Synthesis of 2-substituted 5-nitrothiophene derivatives and their antimicrobial activity
 AUTHOR(S): Arya, V. P.; Fernandes, P.; Sudarsanam, V.
 CORPORATE SOURCE: CIBA Res. Cent., Bombay, India
 SOURCE: Indian Journal of Chemistry (1972), 10(6), 598-601
 CODEN: IJOCAP; ISSN: 0019-5103
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB 2-Acetylthiophene was nitrated to give 2-acetyl-5-nitrothiophene which on bromination affords the corresponding 2-bromoacetyl derivative
 2-Bromoacetyl derivative reacts with guanylthiourea, imidazolidine-2-thione or 3,4,5,6-tetrahydropyrimidine-2-thiol to give the corresponding thiazole, imidazo[2,1-b]thiazole and thiazolo[3,2-a]pyrimidine derivs. When 2-bromoacetyl derivative is reacted with heterocyclic amines like 2-aminopyridine or 2-aminopyrimidine, it forms imidazo[1,2-a]pyridine and imidazo[1,2-a]pyrimidine derivs. resp. A number of condensed imidazoles, e.g. imidazo[1,2-c]pyrimidine, imidazo[1,2-b]pyridazine, imidazo[2,1-b]-1,3,4-thiadiazole, imidazo[2,1-b]benzothiazole, imidazo[1,2-a]benzimidazole, imidazo[1,2-b]indazole and imidazo[1,2-a]-1,8-naphthyridine derivs. were prepared from appropriate amines. The antimicrobial activity of these compds. is also described.
 IT 39565-22-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 39565-22-5 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole, 2-(5-nitro-2-thienyl)- (9CI) (CA INDEX NAME)

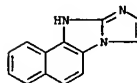


L4 ANSWER 134 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1972:560002 HCAPLUS
 DOCUMENT NUMBER: 77:160002
 TITLE: Heterocyclic compounds. 10. Synthesis of some imidazo[1,2-a]benzimidazoles with potent analgetic activities
 AUTHOR(S): Ogura, Haruo; Takayanagi, Hiroaki; Yamazaki, Yukio; Yonezawa, Shoichi; Takagi, Hiroaki; Kobayashi, Shinsaku; Kanioka, Toshiharu; Kamoshita, Katuo
 CORPORATE SOURCE: Sch. Pharm. Sci., Kitasato Univ., Tokyo, Japan
 SOURCE: Journal of Medicinal Chemistry (1972), 15(9), 923-6
 CODEN: JMCHAR; ISSN: 0022-2623
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 77:160002
 AB The most potent analgetic of a series of imidazo[1,2-a]benzimidazoles synthesized was 2-(p-bromophenyl)-9-[3-(dimethylamino)propyl]-9H-imidazo[1,2-a]benzimidazole (I) [36994-23-9], which had oral ED₅₀ and LD₅₀ values in mice of 6 and 1,100 mg/kg, resp. To synthesize I, 2-aminobenzimidazole was reacted with p-bromophenyl Me ketone in MeOH and the product 1-phenacylbenzimidazole separated from the 1,3-bis(phenacyl)benzimidazole by fractional crystallization. The product was then cyclized in NaOH to the imidazobenzimidazole, which was treated with NaNH₂ in liquid NH₃ and then with 3-(dimethylamino)propyl chloride in dry toluene to yield I.
 IT 23572-32-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)

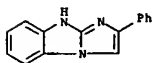


●2 HCl

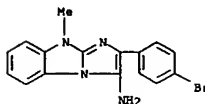
L4 ANSWER 135 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1972:419576 HCAPLUS
 DOCUMENT NUMBER: 77:19576
 TITLE: Imidazoles. LX. Synthesis of 1H-naphth[1,2-d]imidazo[3,2-b]imidazole
 AUTHOR(S): Povstyanov, M. V.; Kochergin, P. M.
 CORPORATE SOURCE: Zaporozh. Gos. Med. Inst., Zaporozhe, USSR
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1971), 7(8), 1121-4
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB 2-Chloro-3-acylalkylnaphth[1,2-d]imidazole (I, X = Cl; R₂ = H or Me; and R₁ = Me₃, Ph, MeCGH₄, MeOCGH₄, ClCGH₄, or BrCGH₄) react with NH₃, primary amines, amino alcs., dialkylaminoalkylamines, or α-amino acid esters in DMF or alcs. at 110-85° (MeOH and EtOH require an autoclave) to give 1H-naphth[1,2-d]imidazo-[3,2-b]imidazole (II) by the replacement of Cl with the amino group followed by cyclization. Sixty compds. were prepared. The reaction products of I and amino alcs. were dehydrated to give the vinyl derivs.
 IT 36759-83-BDP
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 36759-83-B HCAPLUS
 CN 10H-Imidazo[1,2-a]naphth[1,2-d]imidazole, derivs. (preparation of)
 RN 36759-83-B HCAPLUS
 CN 10H-Imidazo[1,2-a]naphth[1,2-d]imidazole (9CI) (CA INDEX NAME)



L4 ANSWER 136 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1972:140650 HCAPLUS
 DOCUMENT NUMBER: 76:140650
 TITLE: Imidazoles. LXX. Synthesis of derivatives of 1(9)-H- and 1H-imidazo[1,2-a]benzimidazoles
 AUTHOR(S): Ponomarev, V. S.; Kochergin, P. M.
 CORPORATE SOURCE: Zaporozh. Med. Inst., Zaporozhe, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1972), (2), 253-6
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB I (R1 = H, alkyl, aryl, R2 = alkyl, aryl, R = H, alkyl) were prepared (34-93%) by heating 1-acyl-2-chlorobenzimidazoles with an amine at 140-80° in MeOH or EtOH.
 IT 23085-25-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 23085-25-8 HCAPLUS
 CN 1H-imidazo[1,2-a]benzimidazole, 2-phenyl- (8CI, 9CI) (CA INDEX NAME)



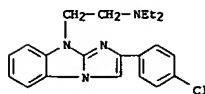
L4 ANSWER 137 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1972:126866 HCAPLUS
 DOCUMENT NUMBER: 76:126866
 TITLE: Imidazo[1,2-a]benzimidazole derivatives. V. 3-Amino derivatives of 2,9-substituted imidazo[1,2-a]benzimidazole
 AUTHOR(S): Simonov, A. M.; Anisimova, V. A.
 CORPORATE SOURCE: Rostov-na-Donu Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1971), 7(5), 673-7
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB Reduction of 3-nitro (or nitroso) derivs. of 2,9-substituted imidazo[1,2-a]benzimidazoles (I, R = Me, Ph, p-BrC6H4, R1 = Me, Et, PhCH2; R2 = H, Me, X = NO2, NO) with SnCl2 in HCl led via the unstable 3-amino derivs. I (X = NH2) and 2-(α-cyanobenzylamino)benzimidazole (II, R = Ph, X = CN) (III), to 2-(α-carboxybenzylamino)benzimidazole (II, R = Ph, X = CO2H). III was a tautomer of I (X = NH2) its reactions with PhCHO, p-O2NCH4CHO, and Ac2O gave I (X = N:CHPh, N:CHC6H4NO2-p, and NHAc resp.). The only stable amines I (X = NH2) were those in which R = Me. III (R1 = Me, R2 = H) (IV) was prepared in 89% yield from a mixture of equimolar amts. of PhCHO, NaHSO3, and 1-methyl-2-aminobenzimidazole in boiling H2O treated with a two-fold molar excess of NaCN. A mixture of IV with a slight molar excess of PhCHO kept. for a short time, at 130°, gave I (R = Ph, R1 = Me, R2 = H, X = N:CHPh). Nitrosation of I (R = Ph, R1 = Et, R2 = Me, X = H) in AcOH with an aqueous solution of NaNO2 afforded the corresponding I (X = NO).
 IT 35681-45-9
 RL: RCT (Reactant); RACT (Reactant or reagent) (acylation of)
 RN 35681-45-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazol-3-amine, 2-(4-bromophenyl)-9-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



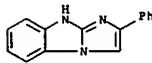
L4 ANSWER 138 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1972:85816 HCAPLUS
 DOCUMENT NUMBER: 76:85816
 TITLE: 2-(p-Halophenyl)-9-(dialkylaminoalkyl)imidazo[1,2-a]benzimidazoles
 INVENTOR(S): Haruo, Ogura; Itoh, Tsuneo; Takayanagi, Hiroaki; Yamazaki, Yukio; Takagi, Hiromu
 PATENT ASSIGNEE(S): Sankyo Co., Ltd.
 SOURCE: Ger. Offen., 21 pp.
 CODEN: GWXXBK
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2131330	A	19720105	DE 1971-2131330	19710621
JP 49004235	B4	19740131	JP 1970-54600	19700623
JP 49004236	B4	19740131	JP 1970-55791	19700626
US 3732243	A	19730508	US 1971-154214	19710617
CA 940134	A1	19740115	CA 1971-116068	19710618
FR 2100813	A5	19720324	FR 1971-22615	19710622
FR 2100813	B1	19741018		
GB 1316894	A	19730516	GB 1971-29478	19710623
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			JP 1970-55791	A 19700626

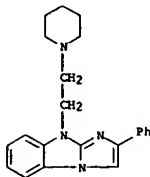
GI For diagram(s), see printed CA Issue.
 AB The title compds. (I, X = (CH2)nNR2; Y = Cl, Br; n = 2, 3; R = Me, Et) and their hydrobromides and hydrochlorides, used as analgesics and psychotropic pharmaceuticals, were prepared by intramol. condensing an imidazole II or by reaction of I (X = H) with Cl(CH2)nNR2. Thus, II.HBr (n = 2, R = Et, Y = Cl) was heated 10 min at 190-200° on an oil bath to give 75% I.HBr (X = CH2CH2NMe2, Y = Cl). Dissolving I (X = H, Y = Cl) and NaNH2 in NH3(l), evaporation of NH3 at approx. 20°, dissolving the residue in toluene, addition of ClCH2CH2NMe2, heating 1 hr at 90°, keeping approx. 12 hr, and passing HCl(g) into the mixture gave 68% I.HCl (X = CH2CH2NMe2, Y = Cl). Similarly prepared were 5 other I. I (X = CH2CH2CH2NMe2, Y = Br) had orally ED50 and LD50 of 6 and 1100 mg/kg, resp.
 IT 35222-34-5P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 35222-34-5 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-ethanamine, 2-(4-chlorophenyl)-N,N-diethyl-, hydrobromide (9CI) (CA INDEX NAME)



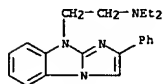
L4 ANSWER 139 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1972:3757 HCAPLUS
 DOCUMENT NUMBER: 76:3757
 TITLE: Synthesis and absorption spectra of imidazo[1,2-a]benzimidazole derivatives
 AUTHOR(S): Ponomarev, V. S.; Kas'yanenko, N. G.
 CORPORATE SOURCE: USSR
 SOURCE: Khim. Issled. Farm. (1970) 52-3
 From: Ref. Zh., Khim. 1970, Abstr. No. 232h422
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB Heating of 1-phenacyl-2-chlorobenzimidazole with alc. NH3 or RNH2 gave I (R1 = H or R, resp.). The uv spectra of I were studied in neutral, acid, or alkaline solution
 IT 23085-25-8P, 1H-imidazo[1,2-a]benzimidazole, 2-phenyl-, derivs.
 RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of derivs. and uv spectra)
 RN 23085-25-8 HCAPLUS
 CN 1H-imidazo[1,2-a]benzimidazole, 2-phenyl- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 140 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1971:447311 HCAPLUS
 DOCUMENT NUMBER: 75:47311
 TITLE: Effect of some new benzimidazole derivatives on the control nervous system
 AUTHOR(S): Ivanovskaya, S. V.
 CORPORATE SOURCE: USSR
 SOURCE: Sb. Nauch. Rab., Volgograd. Gos. Med. Inst. (1969), 22, 139-41
 CODEN: SNVMBP
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB Pharmacol. effects of the benzimidazole derivs. (I, II, and III) were studied. I had a well-expressed depressive action on the central nervous system. II provoked a weak sedative effect, but was able to significantly intensify the anesthetic efficiency of morphine. III had a stimulating effect on the central nervous system. None of the preps. had any antispasmodic effect, and they were unable to inhibit spasms produced in mice by strychnine and camphor.
 IT 23572-33-0
 RL: BIOL (Biological study)
 (nervous system blocking by)
 RN 23572-33-0 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 2-phenyl-9-[2-(1-piperidinyl)ethyl]- (9CI) (CA INDEX NAME)

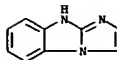


L4 ANSWER 142 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1971:433574 HCAPLUS
 DOCUMENT NUMBER: 75:33574
 TITLE: Comparative pharmacological characteristics of new benzimidazole derivatives
 AUTHOR(S): Ivanovskaya, S. V.
 CORPORATE SOURCE: USSR
 SOURCE: Sb. Nauch. Rab., Volgograd. Gos. Med. Inst. (1969), 22, 142-5
 CODEN: SNVMBP
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB Three benzimidazole derivs. (I, II, and III) were studied. For toxicity detns. in mice, the preps. were administered i.p. in increasing doses. The animals showed a general depression and clonic spasms. II had the lowest toxicity, with an LD50 of 128 mg/kg body weight. The LD50 for I was 116 mg/kg and that for III was 91 mg/kg. A hypotensive effect was shown by all 3 preps. The strongest lowering of the blood pressure was effected by III, but the longest duration of the effect was with I. The blocking of sympathetic ganglions by I and II lasted longer than the action on parasympathetic ganglions. However, the duration of the ganglioblocking action was shorter than the duration of hypotensive action.
 IT 23572-32-9
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmacology of)
 RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)

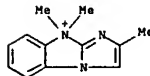


● 2 HCl

L4 ANSWER 141 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1971:447283 HCAPLUS
 DOCUMENT NUMBER: 75:47283
 TITLE: Pharmacotherapy of experimental pituitrin hypertonia in rabbits and dogs by imidazo[1,2-a]benzimidazole derivatives
 AUTHOR(S): Ivanovskaya, S. V.
 CORPORATE SOURCE: USSR
 SOURCE: Sb. Nauch. Rab., Volgograd. Gos. Med. Inst. (1970), 23, 228-31
 CODEN: SNVMBP
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB Exptl. hypertonia was induced in rabbits and dogs by treatment with pituitrin for 25-30 days. Daily administration for 15-30 days of 10 mg/kg of any of the three imidazo[1,2-a]benzimidazoles studied, returned blood pressure to normal. The drugs worked more rapidly in dogs than in rabbits and oral administration was less effective than treatment by s.c. injection.
 IT 247-79-0D, 1H-Imidazo[1,2-a]benzimidazole, derivs.
 RL: BIOL (Biological study)
 (hypertension lowering by)
 RN 247-79-0 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 143 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1971:76372 HCAPLUS
 DOCUMENT NUMBER: 74:76372
 TITLE: Imidazo[1,2-a]benzimidazole derivatives. III. Reactions of 3-nitroso derivatives
 AUTHOR(S): Simonov, A. M.; Anisimova, V. A.; Chub, N. K.
 CORPORATE SOURCE: Rostov-na-Donu Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklichesikh Soedinenii (1970), (7), 977-80
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB A mixture of I (R = Me, R1 = H)·MeI and 10% KOH was heated 2 hr on a boiling water bath to give 80% II (R = CH2Ac, X = NMe) which was also obtained from 1-methyl-2-(methylamino)benzimidazole and MeCOCH2Br. A solution of I (R = Ph, R1 = H) in AcOH was treated with vigorous stirring dropwise at 20° with aqueous NaNO2 to give 92% I (R = Ph, R1 = NO) (III), m. 247°. A suspension of III in EtOH containing NaOH was refluxed 15 min and acidified to pH 5-6 to give 47% II [R = C(:NOH)COPh, X = O] (α-monoxime). From the mother-liquor was isolated after acidification to pH 1 37.5% II [R = C(:NOH)COPh, X = NH] (IV). A solution of IV in 10% KOH was refluxed 2.5 hr to give II [R = C(:NOH)COPh, X = O] (β-monoxime). I (R = Me, R1 = H) in EtOH was treated with HCl and, while cooled, with aqueous NaNO2 to give 80% II [R = C(:NOH)COPh, X = NH]·HCl, m. 196-7°. To a suspension of III in EtOH was added PhCH2CN and 5% NaOH and the whole refluxed 30 min to give 50% I (R = Ph, R1 = N:C(CN)Ph). A mixture of III and p-aminobenzoic acid in AcOH was refluxed 2 hr give 57% I (R = Ph, R1 = N:NC6H4CO2-H-p).
 IT 30770-30-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 30770-30-0 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazolium, 2,9,9-trimethyl-, iodide (8CI) (CA INDEX NAME)

● I⁻

L4 ANSWER 144 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1971:53787 HCAPLUS
 DOCUMENT NUMBER: 74:53787
 TITLE: Antibiotic and antiviral 1-phenacyl-2-aminobenzimidazoles and 1,3-diphenacyl-2-aminobenzimidazolines
 Ogora, Haruo
 SOURCE: Ger. Offen., 21 pp.
 CODEN: GWXRX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2003825	A	19701210	DE 1970-2003825	19700128
JP 48042875	B4	19731214	JP 1969-5977	19690129
FR 2034505	A5	19701211	FR 1970-2999	19700128
CH 529768	A	19721031	CH 1970-529768	19700128
GB 1295478	A	19721108	GB 1970-1295478	19700128
			JP 1969-5977	A 19690129

PRIORITY APPLM. INFO.:

GI For diagram(s), see printed CA Issue.
 AB The antibiotic and antiviral title compds. (I and II) were prepared from 2-aminobenzimidazole (III) with BrCH₂CO₂CH₂R-p. Cyclization of I gave the imidazo-benzimidazole IV, cyclization of II the 9-phenacyl derivative of IV. Thus, reaction of III with BrCH₂Bz 10 days at room temperature gave II and

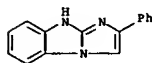
from the filtrate I (R = H), which on refluxing with methanolic NaOH gave IV (R = H).

IT 23085-25-8P

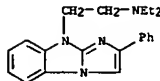
RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 23085-25-8 HCAPLUS

CN 1H-Imidazo[1,2-a]benzimidazole, 2-phenyl- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 145 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1971:51876 HCAPLUS
 DOCUMENT NUMBER: 74:51876
 TITLE: Pharmacology of new benzimidazole derivatives
 AUTHOR(S): Ivanovskaya, S. V.
 CORPORATE SOURCE: USSR
 SOURCE: Trudy Volgogradskogo Gosudarstvennogo Meditsinskogo Instituta (1968), 21(2), 175-8
 CODEN: TVLM38; ISSN: 0376-141X
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB The LD50 of dichlorohydrate of 9-diethylaminoethyl-2-phenylimidazo[1,2-a]benzimidazole (I) after i.p. injection in mice was 116 mg/kg; 30 mg/kg was sufficient to decrease the motor activity. In 24 cats anesthetized by Nembutal, 10 mg of I/kg had 2-2.5 hr of hypotensive effects and caused a more prolonged depression of parasympathetic and sympathetic ganglia. I (20 mg/kg) caused death by stopping respiration and by a sudden drop in the blood pressure. I decreased the contractions of isolated frog heart. In mice, I potentiated the effect of chloral hydrate or amobarbital.
 IT 23572-32-9
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmacology of)
 RN 23572-32-9 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

L4 ANSWER 146 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1970:509739 HCAPLUS
 DOCUMENT NUMBER: 73:109739
 TITLE: Imidazo[1,2-a]benzimidazole derivatives. II. Aldehydes and styryl derivatives of imidazo[1,2-a]benzimidazole
 Simonov, A. M.; Anisimova, V. A.; Grushina, L. E.
 CORPORATE SOURCE: Rostov-na-Donu Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1970), (6), 838-41
 CODEN: KGSSAQ; ISSN: 0132-6244

DOCUMENT TYPE: Journal
 LANGUAGE: Russian

GI For diagram(s), see printed CA Issue.

AB A hot EtOH soln of 1-methyl-2-aminobenzimidazole was mixed with MeCOCH₂Br to give 85.5% 1-methyl-3-acetyl-2-aminobenzimidazolone-HBr (I), m. 287° (decomposition); free base (II) m. 110-11°. II cyclized slowly to give III (R = Me) (IV), m. 94°; HCl salt (V) m. 200° (decomposition). V was obtained in 88% yield by 2-hr reflux of I or II in concentrated HCl. IV in Me₂NCHO and POCl₃ gave 70% VI (R = Me)

(VII), m. 186°; 2,4-dinitrophenylhydrazones m. 288°; oxime m. 265°; MeI salt m. 246-7°. Similarly was obtained in 88% yield VI (R = Ph) (VIII), m. 147°; 2,4-dinitrophenylhydrazones m. 304°; oxime m. 235°; MeI salt m. 232-3° (decomposition). VII, hippuric acid, fused AcONa, and Ac₂O gave 62% 2-phenyl-4-(2,9-dimethylimidazo[1,2-a]benzimidazol-3-ylmethylene)oxazol-5-one, m. 252.5°. Similarly was obtained from VIII in 24% yield 2-phenyl-4-(9-methyl-2-phenylimidazo[1,2-a]benzimidazol-3-ylmethylene)oxazol-5-one, m. 252°. A mixture VIII, anhydrous AcONH₄, and MeNO₂ was refluxed to give, after chromatog., 47% 3-(p-nitrovinyl)-9-methyl-2-phenylimidazo[1,2-a]benzimidazole, m. 189-9.5°. IV in aqueous KMnO₄ yielded 1,1'-dimethyl-2,2'-azobenzimidazole, m. 283-4°. Heating IV with aldehydes at 65-100° for 5-10 min gave III (R, m.p., and % yield given): CH:CHPh, 215°, 90; CH:CHC₆H₄NO₂-p, 221° (decomposition), 71.5; CH:CHC₆H₄OH-o, 297°, 98; CH:CHC₆H₃(OH)2-2,4, 307°, 41; CH:CHC₆H₄NMe₂-p, 282°, 63. Reflux of VI with appropriate amines in EtOH gave the following IX (R, R₁, m.p., time of reflux in hr, and % yield given): Me, C₆H₄OH-o, 292° (decomposition), 2, 83; Ph, C₆H₄OH-o, 245° (decomposition), 10, 38; Me, C₆H₄NO₂-p, 142° (with 1 H₂O), 3, 98. IX (R = R₁ = Ph, C₆H₄NO₂-p), m. 230°, was obtained in 76% yield by melting 5 hr at 150°. Some uv spectra are given and discussed.

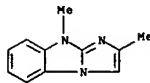
IT 28992-70-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 28992-70-3 HCAPLUS

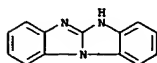
CN 9H-Imidazo[1,2-a]benzimidazole, 2,9-dimethyl-, monohydrochloride (8CI) (CA INDEX NAME)

L4 ANSWER 146 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

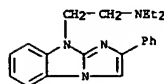


● HCl

L4 ANSWER 147 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1970:509737 HCAPLUS
 DOCUMENT NUMBER: 73:109737
 TITLE: Thermolysis and photolysis of 1-benzotriazolyl derivatives
 AUTHOR(S): Hubert, Andre J.; Reimlinger, Hans
 CORPORATE SOURCE: Union Carbide Eur. Res. Assoc., Brussels, Fed. Rep. Ger.
 SOURCE: Chemische Berichte (1970), 103(9), 2828-35
 CODEN: CHBEAM; ISSN: 0009-2940
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 G1 For diagram(s), see printed CA Issue.
 AB Reaction of benzotriazole with RCl or 1-(R-substituted)-2-chlorobenzimidazoles gave 10-80% 1-(R-substituted)benzotriazoles (I) (R = 1,2-benzisothiazol-3-yl, 3-triazolo[1,5-a]pyrimidin-7-yl (Ia); 5-triazolo[3,4-a]isouquinolin-3-yl (Ib), 2-pyrimidinyl (Ic), 3-methyl-2-pyridyl, 4-oxo-9-methyl-4H-pyrido[1,2-a]pyrimidin-2-yl, 2,4-dichloro-3-triazin-6-yl, 3-methoxy-6-pyridazinyl (Id), 3-phenyl-1,2,4-oxadiazol-5-yl, and 4-thieno[3,2-c]pyridyl) or 50-60% 1-(R-substituted)-2-(1-benzotriazolyl)benzimidazoles (II) (R = H, Me, or PhCH₂), resp. Photolysis of II 30-60 min at 20° gave 25-30% 5-(R-substituted)-benzimidazo[1,2-a]benzimidazoles (III) (R = H, Me, or PhCH₂). Photolysis of I gave undefined decomposition products.
 Thermolysis of Ia-Id in polyphosphoric acid at 140-50° gave 60% 3-triazolo[2',3':3,2]pyrimido[1,6-a]benzimidazole (IV), 30% benzimidazo[1',2':1,5]triazolo[3,4-a]isouquinoline (V), 60% pyrimido[1,2-a]benzimidazole (VI), and 50% 2-hydroxypyridazino[1,6-a]benzimidazole (VII), resp.
 IT 28990-99-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 28990-99-5 HCAPLUS
 CN 5H-Benzimidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



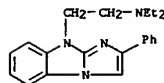
L4 ANSWER 148 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1970:475494 HCAPLUS
 DOCUMENT NUMBER: 73:75494
 TITLE: Pharmacology of new derivatives of benzimidazole
 AUTHOR(S): Ivanovskaya, S. V.
 CORPORATE SOURCE: USSR
 SOURCE: Sb. Nauch. Rab. Volgograd. Med. Inst. (1968), 21(2), 175-8
 From: Ref. Zh., Farmakol., Khimioter. Sredstva, Toksikol. 1969, Abstr. No. 8.54.349
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The pharmacol. properties of 9-diethylaminoethyl-2-phenyl-9H-imidazo[1,2-a]benzimidazole dihydrochloride (I) are studied. LD50 of I for mice i.p. is 116 mg/kg. In narcotized cats I in an optimum dose of 10 mg/kg i.v. lowers the arterial pressure to an average of 44.3 mm Hg in 2-2.5 hr and depresses the activity of parasympathetic and sympathetic ganglia. In a concentration of 10-5M, I abridges the rhythm and somewhat increases the amplitude of systole of the isolated heart of the frog, while in a concentration of 10-3-10-4M it causes cessation of beating. In rats I (20 mg/kg; means of injection not indicated) stops the orientation reaction, while in mice I raises the soporific effect of barbamy (70 mg/kg) and chloral hydrate (300 mg/kg i.p.). In the hypotensive action of I there is a depressing effect upon the heart and a sedative effect.
 IT 23572-32-9
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmacology of)
 RN 23572-32-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

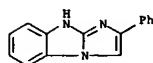
L4 ANSWER 149 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1969:481267 HCAPLUS
 DOCUMENT NUMBER: 71:81267
 TITLE: Derivatives of imidazo[1,2-a]benzimidazole containing a β-dialkylaminoalkyl group
 AUTHOR(S): Simonov, A. M.; Belous, A. A.; Anisimova, V. A.; Ivanovskaya, S. V.
 CORPORATE SOURCE: Rostov-na-Donu Univ., Rostov-on-Don, USSR
 SOURCE: Khimiko-Farmatsyevicheskii Zhurnal (1969), 3(1), 7-10
 CODEN: KHFZAH; ISSN: 0023-1134
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 71:81267
 G1 For diagram(s), see printed CA Issue.
 AB A solution of 2 g. of BzCHZBC in 9 ml. EtOH and 5-10 drops of concentrated HBr solution was added to a solution of 2.32 g. 2-amino-1-[β-(diethylamino)ethyl]benzimidazole in 6 ml. EtOH and the mixture boiled 5-10 min. and kept overnight to give 79% 2-imino-1-[β-(diethylamino)ethyl]-3-phenacylbenzimidazoline (I) dihydrobromide (II); m. 249° (EtOH). Another 2.15 g. was recovered from the mother liquor by Et₂O extraction. The following were prepared analogously: 85% 2-imino-1-[β-(1-piperidyl)ethyl]-3-phenacylbenzimidazoline (III) dihydrobromide, m. 221° (EtOH); 42% 2-imino-1-[β-(diethylamino)ethyl]-3-acetonylbenzimidazoline (IV) dihydrobromide (V), m. 200-2° (EtOH-Et₂O). V did not precipitate but was recovered by Et₂O extraction. The addition of excess cold aqueous 22% NH₃ to a cold aqueous solution of II gave I, an oil which crystallized on rubbing, m. 78°; III, m. 112° (aqueous EtOH), and IV, an uncrystallizable oil. I, III, and IV all decomposed on standing. II boiled with excess concentrated aqueous HCl 7 hrs., cooled, neutralized with 22% NH₃, and extracted with Et₂O and the solvent evaporated gave 95% 9-[β-(diethylamino)ethyl]-2-phenylimidazo[1,2-a]benzimidazole (VI), a thick oil; dihydrochloride (VII) m. 205-6° (glacial HOAc); dipicrate m. 247° (decomposition) (EtOH). Similarly prepared were: 95% 9-[β-(1-piperidyl)ethyl]-2-phenylimidazo[1,2-a]benzimidazole m. 80-2° [dihydrochloride (VIII) m. 225° (glacial HOAc); dipicrate m. 269° (decomposition) (EtOH-Et₂O)]; and 90% 9-[β-(diethylamino)ethyl]-2-methylimidazo[1,2-a]benzimidazole an oil; dihydrochloride (IX), m. 160-2° (EtOH); dipicrate (X) m. 256-8° (absolute EtOH). X is also produced by the action of picric acid on IV. VII, VIII, and IX exhibit hypotensive action in cats; retardation of contraction of isolated frog's heart; depression of parasympathetic and sympathetic nervous systems; and prolongation of the effects of soporifics in white mice.
 IT 23572-32-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 23572-32-9 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole-9-ethanamine, N,N-diethyl-2-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 149 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)

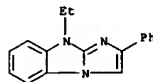


● 2 HCl

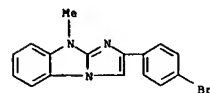
L4 ANSWER 150 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STM
 ACCESSION NUMBER: 1969:413065 HCAPLUS
 DOCUMENT NUMBER: 71:13065
 TITLE: Synthesis of condensed imidazole system derivatives from 2-haloimidazoles and 8-haloanthrines
 AUTHOR(S): Kochergin, P. M.; Prilimenko, B. A.; Ponomarev, V. S.; Povstynnoi, M. V.; Tkachenko, A. A.; Mazur, I. A.; Krasovskii, A. M.; Knysh, E. G.; Yurchenko, M. I.; Vses. Nauch.-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR
 CORPORATE SOURCE: Khimiya Geterotsiklicheskh Soedinenii (1969), (1), 177-8
 SOURCE: CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB With known methods (F. Kroehnke, et al., 1955; A. Lawson, H. V. Morley, 1957) the following new compds. were obtained: 1-phenacyl-2-bromo-4,5-diphenylimidazole, m. 180-1° (MeOH); 1-phenacyl-2-chlorobenzimidazole, m. 168-70° (MeOH); 3-acetonyl-2-chloronaphth-[1,2-d]imidazole, m. 133-4° (aqueous EtOH); 3-phenacyl-2-chloronaphth[1,2-d]imidazole, m. 200-1° (aqueous MeOH); 1,2,5,6-tetraphenylimidazo[1,2-d]imidazole, m. 252-3° (aqueous MeOH); 2-phenylimidazo[1,2-d]benzimidazole, m. 285-7° (aqueous AcOH); 1-(p-methoxyphenyl)-2-phenylnaphth[1,2-d]imidazo[3,2-b]imidazole, m. 266-7° (EtOH); 2-phenyl-6,8-dimethylimidazo-[1,2-f]xanthine, m. >320°; 2,5,6-triphenyl[2,1-b]thiazole, m. 175-7° (dioxane); 2-phenylthiazolo[3,2-a]benzimidazole, m. 166-7° (aqueous EtOH); 2-methylnaphth[1,2-d]imidazo[3,2-b]thiazole, m. 184-5° (EtOH) (decomposition); 2-phenyl-6,8-dimethylthiazolo-[3,2-f]xanthine, m. 260-1.5° (MeZnCHO).
 IT 23085-25-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 23085-25-8 HCAPLUS
 CN 1H-imidazo[1,2-a]benzimidazole, 2-phenyl- (8CI, 9CI) (CA INDEX NAME)



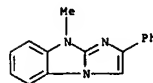
L4 ANSWER 151 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STM
 ACCESSION NUMBER: 1969:96712 HCAPLUS
 DOCUMENT NUMBER: 70:96712
 TITLE: Imidazoles. XXIX. Imidazo[1,2-a]benzimidazoles
 AUTHOR(S): Kochergin, P. M.; Simonov, A. M.
 CORPORATE SOURCE: Vses. Nauch.-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR
 SOURCE: Khim. Geterotsikl. Soedin., Sb. 1: Azotoderzhashchie Geterotsikly (1967), 133-6. Editor(s): Hillers, S. Izd. "Zinatne": Riga, USSR.
 CODEN: ZONNA2
 DOCUMENT TYPE: Conference
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB Ia-e (see table) were prepared by adding 0.01 mole α-halo ketones in 10-20 cc. Me₂CO at 30-40° to an equimol. amount of 1-ethyl-2-aminobenzimidazole in 40 cc. Me₂CO, refluxing 1-2 hrs., and keeping overnight. IIa-e (see table) were obtained by adding 2-4 cc. of 20-5% aqueous NH₃ to 1 g. I in 20-50 cc. hot MeOH, stirring 2-3 min., and pouring in H₂O. Imidazo[1,2-a]benzimidazoles (IIa-e) (see table) were prepared from the corresponding I and (or) II. Thus, 1 g. Ib in 40 cc. 36% HCl or 42% HBr was refluxed for 5 hrs., kept overnight, filtered, the precipitate dissolved in 10 cc. hot MeOH, treated with 1 cc. 40% aqueous NaOH, stirred for 2-4 min., and poured in 50 cc. H₂O to give 0.62-0.65 g. IIb. Refluxing 1.1 g. Ic in 10 cc. 85% HCO₂H for 5 hrs., adding 3 cc. of saturated aqueous solution of AcONa, stirring 2-4 min., and pouring into 50-60 cc. H₂O yielded 0.75 g. IIIC. Similarly, IIId and IIIE were obtained from Id and Ie, resp. Refluxing 5 g. Ib in 50 cc. POCl₃ for 5 hrs., removing the solvent in vacuo, dissolving the residue in H₂O, alkalinizing the aqueous solution with NaOH, and extracting with CHCl₃ gave 99.2% crude IIb, which was crystallized from Et₂O. Similarly, IIIa was prepared from Ia. Crystallization of IIe from EtOH with 1 drop of AcOH followed by addnl. recrystn. from pure EtOH yielded IIIE. Similarly, IIIC and IIId were obtained from IIc and IId, resp.
 IT 2208-82-4P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 2208-82-4 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole, 9-ethyl-2-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 152 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STM
 ACCESSION NUMBER: 1969:77868 HCAPLUS
 DOCUMENT NUMBER: 70:77868
 TITLE: Synthesis and transformation of imidazo[1,2-a]benzimidazole derivatives. I
 AUTHOR(S): Simonov, A. M.; Anisimova, V. A.
 CORPORATE SOURCE: Rostov.-na-Donu Gos. Univ., Rostov-on-Don, USSR
 SOURCE: Khimiya Geterotsiklicheskh Soedinenii (1968), (6), 1102-4
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI For diagram(s), see printed CA Issue.
 AB ArCOCH₂Br and 1-alkyl-2-aminobenzimidazole gave the following I (R₂ = NH) (R₁, Ar, % yield, m.p., and m.p. HBr salt given): Me, Ph (II), 99, 146° (aqueous alc.), -; Me, p-BrC₆H₄, 98, 161° (decomposition) (MeOH), 284-5° (decomposition) (alc.); and CH₂Ph, Ph, 98, 170-1° (aqueous alc.), 267-8° (decomposition) (alc.-Et₂O). II was refluxed 4 hrs. with excess POCl₃ or concentrated HCl to give 91.5% III (R₁ = Ph, R₂ = H, R₃ = Me) (IV), m. 120° (aq. alc.). The following III (R₂ = H) were obtained (R₁, R₃, % yield, and m.p. given): p-BrC₆H₄, Me, 66, 153° (MeOH); and Ph, CH₂Ph, 93.3, 147° (MeOH). IV was methylated with MeI at position 1. KOH (0.25 g.) and 1 g. IV.MeI [m. 234° (decomposition) (alc.)] in 10 cc. 50% alc. was refluxed 1 hr. to give 70% I (R₁ = Me, R₂ = O, Ar = Ph) (V). 1-Methylbenzimidazolone (VI) and an equimolar amount BrCH₂Br was refluxed 10 min. in alc. and worked up to give 64% V, m. 168°; oxime m. 210° (aqueous alc.); picrate m. 182° (decomposition) (alc.). Br (0.005 mole) in CHCl₃ was added to 0.005 mole IV in dry CHCl₃ over 30 min. at 20° with vigorous stirring and the mixture kept 30 min. to give 98% III (R₁ = Ph, R₂ = Br, R₃ = Me) (VII.HBr), m. 245°. VII (0.65 g.), m. 148° (alc.), and 0.55 cc. PhSO₃Me was heated 30 min. at 80° to give 96% VII methylbenzenesulfonate (VIII), m. 227° (alc.-Et₂O). VIII (1.45 g.) was refluxed 30 min. with 5 cc. 10% KOH to give 48.8% VI. VII (0.33 g.), 0.08 g. NaNO₂, and 3 cc. HCONMe₂ was refluxed 1 hr. to give 80% III (R₁ = Ph, R₂ = NO₂, R₃ = Me), m. 205° (alc.-Me₂CO). VII (0.5 g.), 0.7 g. piperidine, and 5 cc. HCONMe₂ was refluxed 2 hrs. to give 0.47 g. I, (R₁ = Ph, R₂ = N-piperidino, R₃ = Me), m. 134-5° (petroleum ether). Similarly, 90% I (R₁ = Ph, R₂ = N-morpholino, R₃ = Me), m. 212-13° (petroleum ether), was obtained.
 IT 21431-83-4P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 21431-83-4 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole, 2-(4-bromophenyl)-9-methyl- (9CI) (CA INDEX NAME)

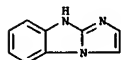


L4 ANSWER 153 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STM
 ACCESSION NUMBER: 1965:471994 HCAPLUS
 DOCUMENT NUMBER: 63:71994
 ORIGINAL REFERENCE NO.: 63:13260a-f
 TITLE: Synthesis of fused imidazo-heterocyclic systems
 AUTHOR(S): Werbel, Leslie M.; Zamora, Maria L.
 CORPORATE SOURCE: Parke, Davis & Co., Ann Arbor, MI
 SOURCE: Journal of Heterocyclic Chemistry (1965), 2(3), 287-90
 CODEN: JHCCAD; ISSN: 0022-152X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The reaction of phenylacetyl bromide and a variety of α-amino heterocycles was investigated to determine its applicability to the preparation of fused imidazo-heterocyclic systems. The imidazo[1,2-a]pyrazine, imidazo[1,2-b]pyridazine, and imidazo[1,2-a]benzimidazole systems and some variations of the imidazo[1,2-a]pyridine, imidazo[2,1-b]thiazole, imidazotriazine, imidazo[2,1-b]-1,3,4-thiadiazole systems are described.
 IT 3649-20-5, 9H-imidazo[1,2-a]benzimidazole, 9-methyl-2-phenyl-, hydrobromide (preparation of)
 RN 3649-20-5 HCAPLUS
 CN 9H-imidazo[1,2-a]benzimidazole, 9-methyl-2-phenyl-, monohydrobromide (9CI) (CA INDEX NAME)



● HBr

L4 ANSWER 154 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1965:439074 HCAPLUS
 DOCUMENT NUMBER: 63:699074
 ORIGINAL REFERENCE NO.: 63:6994d-f
 TITLE: Synthesis of imidazo[1,2-a]benzimidazole and imidazolino-[1,2-a]benzimidazole derivatives
 AUTHOR(S): Simonov, A. M.; Kochergin, P. M.
 CORPORATE SOURCE: State Univ. Rostov-on-Don
 SOURCE: Khimiya Geterotsiklicheskih Soedinenii (1965), (2), 316-17
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 G1 For diagram(s), see printed CA Issue.
 AB Reaction of 1-alkyl-2-aminobenzimidazoles with α -halo ketones and α -halo alcs. gave the corresponding 1,3-disubstituted 2-iminobenzimidazolines, which under the action of dehydrating agents or by heating with mineral or organic acids lost H₂O and gave derivatives of [1,2-a]benzimidazole (I) or the corresponding 2,3-dihydro compds. Thus were obtained: 1-ethyl-3-phenacyl-2-iminobenzimidazoline, m. 120.5° (aqueous MeOH) [hydrobromide m. 222.5° (decomposition, MeOH)]; 2-phenyl-9-ethylimidazo[1,2-a]benzimidazole, m. 93-3.5° (aqueous EtOH) [picrate m. 238-40° (decomposition, EtOH)]; 1-ethyl-3-(6-hydroxyethyl)-2-iminobenzimidazoline, m. 122.5-23° (CH₂Cl₂) [hydrobromide m. 226.5-27° (decomposition, EtOH); picrate m. 182-3° (H₂O)]; and 9-ethylimidazo[1,2-a]benzimidazole [picrate m. 267-8° (decomposition, AcOH)].
 IT 247-79-0, 9H-Imidazo[1,2-a]benzimidazole (derivs.)
 RN 247-79-0 HCAPLUS
 CN 1H-Imidazo[1,2-a]benzimidazole (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 155 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1960:68172 HCAPLUS
 DOCUMENT NUMBER: 54:68172
 ORIGINAL REFERENCE NO.: 54:13100b-1,13101a-d
 TITLE: Studies in the azole series. XI. Synthesis and reactions of the 2-chlorooxazolones
 AUTHOR(S): Gospper, Rudolf; Effenberger, Franz
 CORPORATE SOURCE: Tech. Hochschule, Stuttgart, Germany
 SOURCE: Chemische Berichte (1959), 92, 1928-34
 CODEN: CHBEAM; ISSN: 0009-2940
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 OTHER SOURCE(S): CASREACT 54:68172
 AB cf. preceding abstract 2-Oxazolones (II) with POC13 give the corresponding 2-chlorooxazolones (III). The replacement of the Cl in the II proceeds readily with Na alcoholates, amines, and PhCH₂NH₂. The structure of the resulting 2-aminooxazolones is discussed on the basis of their ultraviolet absorption spectra. The appropriate I (1 mole) dissolved in the 5-fold amount of POC13, the solution treated dropwise with shaking and cooling with 1 mole Et₃N, heated to 120°, distilled in vacuo to remove the excess POC13, the residue poured onto ice, neutralized with NaOH and NaHCO₃, extracted with Et₂O, and the extract worked up gave the II. 4,5-Diphenyl-2-oxazolone (III) (48 g.), 20.5 g. Et₃N, and 165 cc. POC13 gave during 10 hrs. 40.8 g. 2-chloro-4,5-diphenyloxazole (IV), b_{0.02} 150°, pale yellow crystals, m. 44°. 4,5-Dipropyl-2-oxazolone (12 g.), 10 g. Et₃N, and 75 cc. POC13 yielded during 2 hrs. 5.9 g. 2-chloro-4,5-dipropylloxazole (V), b₁₀ 90-1°. 5-Ethyl-4-phenyl-2-oxazolone (10 g.), 6 g. Et₃N, and 50 cc. POC13 gave during 2 hrs. 7.8 g. 2-chloro-5-ethyl-4-phenyloxazole (VI), b_{0.2} 93-4°. The appropriate II (0.01 mole) added to 0.04 mole Na in 100 cc. absolute EtOH, heated briefly to boiling, filtered, and the filtrate distilled or treated with H₂O and recrystd. yielded the corresponding 2-alkoxyoxazole. IV (2.5 g.), 1 g. Na, and 100 cc. MeOH gave 2.35 g. 2-methoxy-4,5-diphenyloxazole, light yellow, m. 44°; V (2.1 g.), 1 g. Na, and 100 cc. MeOH gave 0.7 g. 2-methoxy-4,5-dipropylloxazole, b₁₀ 90°; VI (1.6 g.), 1 g. Na, and 100 cc. MeOH yielded 0.7 g. 2-methoxy-5-ethyl-4-phenyloxazole, m. 49°. IV (1.6 g.), 1 g. Na, and 150 cc. EtOH yielded 1.75 g. 2-ethoxy-4,5-diphenyloxazole, m. 64-5°. The appropriate II (0.01 mole) in 50 cc. xylene and 0.03 mole amine heated to 145-55°, cooled, filtered, evaporated, and the residue distilled or recrystd. gave the corresponding 2-aminooxazole. IV (9 g.), 12 g. PhNH₂, and 100 cc. xylene yielded during 4 hrs. 8.5 g. 2-anilino-4,5-diphenyloxazole (VII), m. 155° (EtOH); picrate, gold-yellow prisms, m. 206-7° (EtOH); HCl salt, needles, m. 168°. Ac derivative, needles, m. 93-4° (EtOH). IV (4.3 g.), 4.5 g. MePhNH₂, and 100 cc. xylene heated 3 hrs. gave 4.75 g. 2-(N-methylanilino)-4,5-diphenyloxazole (VIII), leaflets, m. 118° (EtOH). VII (1.6 g.) in 200 cc. Me₂CO and 25 cc. N NaOH treated during 2 hrs. at 50° with 2.5 g. Me₂SO₄ and 25 cc. N NaOH gave 1.4 g. VIII. IV (4.3 g.), 5.4 g. PhCH₂NH₂, and 100 cc. xylene refluxed 3 hrs., treated with CO₂, and washed with H₂O gave 2.3 g. 2-benzylamino-4,5-diphenyloxazole, needles, m. 134-6° (EtOH). IV (2.5 g.), 3 g. PhCH₂NHMe, and 50 cc. xylene refluxed 4 hrs. yielded 1.6 g. 2-(N-methylbenzylamino)-4,5-diphenyloxazole, bluish fluorescing needles, m. 73° (80% EtOH). IV (2.5 g.) and 3.7 g. PhCH₂NHPh heated 1.5

L4 ANSWER 155 OF 155 HCAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 hrs. at 150° gave 2.45 g. 2-(N-benzylanilino)-4,5-diphenyloxazole, needles, m. 105° (MeOH). V (1.9 g.), 3.1 g. MePhNH₂, and 50 cc. xylene refluxed 2 hrs. yielded 2.35 g. 2-(N-methylanilino)-4,5-dipropylloxazole, b_{0.15} 113-15°. VI (2.1 g.), 3.0 g. PhCH₂NHMe, and 30 cc. xylene refluxed 2 hrs. gave 1.7 g. 2-(N-methylbenzylamino)-5-ethyl-4-phenyloxazole, b_{0.09} 144-6°. IV (5 g.) heated 6 hrs. with 200 cc. EtOH (satd. with NH₃) in an autoclave at 150°, the mixt. extd. with Et₂O, the residual sirup boiled with Ac₂O, the excess Ac₂O distd., and the residue dild. with EtOH and filtered off gave 2-acetamido-4,5-diphenyloxazole, pale yellow needles, m. 135-6° (EtOH). IV (2.5 g.) and 3 g. o-C₆H₄(NH₂)₂ heated 4 hrs. at 150° and the crude product boiled 3 times with 150 cc. H₂O and recrystd. from EtOAc gave 2 g. 1,2-diphenylimidazo [1,2-a]benzimidazole, m. 297-8°. IV (2.55 g.) and 30 cc. HCONH₂ heated 3 hrs. at 185° poured into H₂O, and filtered gave 2.5 g. III, m. 211° (MeOH). PhCH₂CO₂H (2.6 g.) in 14 cc. abs. C₆H₆ treated with 1.2 g. NaNH₂ and then dropwise during 0.5 hr. with 2.5 g. IV in C₆H₆, poured after 2 hrs. into H₂O, extd. with C₆H₆, and the ext. worked up yielded 1.35 g. α -(4,5-diphenyl-2-oxazolyl)benzyl cyanide, m. 109°. IV (2.5 g.) in 25 cc. CH₂Cl₂ added dropwise rapidly to 2.1 g. [Et₃O][BF₄] in 25 cc. CH₂Cl₂, kept several hrs., evapd. in vacuo, and the oily residue kept 24 hrs. under Et₂O yielded the cryst. 2-chloro-3-ethyl-4,5-diphenyloxazolium fluoroborate (VIIIa). Crude VIIIa (1.8 g.) in 20 cc. CH₂Cl₂ treated with 2 g. PhNH₂ in 10 cc. CH₂Cl₂, stored several hrs., filtered, and the filtrate evapd., and the residue treated with a little EtOH gave 1.4 g. fluoroborate (IX) of 2-phenylimino-3-ethyl-4,5-diphenyloxazoline (X), m. 236-8°. IX (0.6 g.) in 50 cc. dioxane refluxed 3 hrs. with 0.5 g. NEt₃, evapd. in vacuo, and the residue treated with a little MeOH gave pale yellow leaflets, m. 97°. 3-Benzyl-4,5-diphenyloxazolone (10 g.) and 20 g. P₂S₅ in 600 cc. xylene heated 24 hrs. at 95-115°, filtered hot, distd., and the residue treated with MeOH gave 5.5 g. 3-benzyl-4,5-diphenyl-2-oxazolethione (XI), m. 122° (MeOH). XI (1.7 g.) and 0.5 g. PhNH₂ heated 4 hrs. at 120-35°, cooled, and digested with a little MeOH gave 1.6 g. 2-phenylimino-3-benzyl-4,5-diphenyloxazoline, needles, m. 119° (EtOH). XI and Me₂SO₄ in PhNO₂ heated, washed with Et₂O, treated with 2 g. PhNH₂, and filtered gave 2.9 g. product, m. 119° (EtOH).
 IT 112376-72-4, 9H-Imidazo[1,2-a]benzimidazole, 2,3-diphenyl- (preparation of)
 RN 112376-72-4 HCAPLUS
 CN 9H-Imidazo[1,2-a]benzimidazole, 2,3-diphenyl- (6CI) (CA INDEX NAME)

